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OFFICIAL COAT OF ARMS OF THE DOMINION OF CANADA,  
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CANADA

DOMINION BUREAU OF STATISTICS

# THE CANADA YEAR BOOK 1921

Published by Authority of  
The Honourable J. A. ROBB, M.P.,  
Minister of Trade and Commerce



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## PREFACE.

The outstanding feature of the Canada Year Book of 1921 is an increase in the scope of the publication, especially in the letter-press. Historical details have been added to many sections and sub-sections, and historical tables have been inserted to illustrate progress since Confederation.

To particularize, it was felt that the Constitution and Government of Canada required treatment in the light of the altered status of the Dominion, and that the evolving governments of the Provinces should also be described, especially as previous Year Books containing information on these matters are out of print. The same applies to the treatment of the physical characteristics of Canada in section IV. In section V, on Population, are included the results of the census of 1921, as far as available, while vital statistics for the country as a whole are published for the first time. An interesting contribution on the development of agriculture in Canada, by the Deputy Minister of Agriculture, introduces the section on Production, which for the first time includes statistics of the fur trade and closes with an article showing the development of Canadian water powers. In the Trade and Commerce section a new table shows the trade of Canada by main groups, compiled on a classification according to purpose. The development of different means of transportation is outlined in the various sub-sections of the Transportation and Communications section. The Labour, Wages and Prices section has been considerably expanded, through the generous assistance of the Department of Labour; special mention may be made of the article "Canada and the International Labour Organization" (pp. 607-609), contributed by the Assistant Deputy Minister of Labour. The Finance section has been improved by a comprehensive treatment of Dominion Finance since Confederation, and by the publication of a historical table and five-year detailed tables of Provincial Public revenue and expenditure, compiled on a comparable basis by the Finance Statistics Branch of the Bureau, which is also responsible for the compilation of the municipal financial statistics presented. In this section attention may be drawn to the table on pages 717 and 718, showing the development of Canadian banking since Confederation, and to the table on page 754, showing the expansion of life insurance since that date; it is thought that the statistics of insurance are presented in a more intelligible form than previously. To the Administration section has been added, through the courtesy of the Department of Indian Affairs, an authoritative account of the Indians of Canada, as well as a summary treatment of the activities of the new Department of Health, the Department of Soldiers' Civil Re-establishment and the Soldiers' Settlement Board.

In accordance with the general demand for presentation of statistics in graphic form, additions have been made to the graphs contained in the Labour, Wages and Prices section. Also, in response to a general desire for statistics in tabloid form of the progress of Canada during the past half-century, the Statistical Summary of the Progress of Canada has been enlarged so as to include historical as well as current trend statistics.

In all the sections is given the latest information available, the tables in many cases including figures for the fiscal year 1921-22. The titles of articles published in previous editions of the Year Book and not now revised, are given for purposes of reference in the Retrospective Index on page xvii.

The present edition of the Canada Year Book has been edited by Mr. S. A. CUDMORE, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R. Econ. Soc. Grateful acknowledgments are hereby tendered to officials of the Dominion and Provincial Governments throughout Canada, for assistance rendered in the collection of information. The tables have been in the main compiled, as for many years, by Messrs. James Skead and Joseph Wilkins, while most of the diagrams have been drawn by Mr. R. E. Watts.

R. H. COATS,  
*Dominion Statistician.*

Dominion Bureau of Statistics,  
Ottawa, October 15, 1922.





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(Not repeated in this Edition.)

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Natural Resources of the Dominion of Canada. By WATSON GRIFFIN, Department of Trade and Commerce, Ottawa. With 10 illustrations.....	1916-17	1-61
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Fifty Years of Canadian Progress, 1867 to 1917. By ERNEST H. GODFREY, F.S.S., Editor, Dominion Bureau of Statistics, Ottawa.....	1918	23-72
History of the Great War. By Brig.-General E. A. CRUIKSHANK, LL.D., F.R.S.C., Director of the Historical Section, General Staff, Department of Militia and Defence, Ottawa. With appendices.....	1919	1-73
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## ERRATA.

- Page 9. Line 5. The index figure "1" referring to foot-note, should be inserted here after the word "Council" instead of in line 24.
- Page 159. Twelve male and two female students of Queen's University, are erroneously entered as in Veterinary Medicine instead of in Theology. The totals in the theological faculties of all universities should therefore be 664 males and 7 females, and in the faculty of veterinary medicine 20 males.
- Page 301. In table 58, the proportion of asses in the British Empire to the world total at the date nearest 1921, should be 25.4 instead of 20.7 p.c.
- Page 663. In Table 7, last line but one, Business War profits tax revenue in 1921 yielded \$40,841,401.25, not \$48,841,401.25.



## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles:—Land, 3,603,910: Water, 125,755: Total, 3,729,665.

No.	Items.	1871.	1881.	1891.	1896.	1901.
1	Estimated population..... No.	3,689,287	4,324,810	4,833,239	5,086,000	5,371,315
2	Immigration..... No.	27,773	47,991	82,165	16,835	49,149
	<b>Agriculture—</b>					
3	Wheat..... Acres	1,646,781	2,366,554	2,701,213	—	4,224,542
4	Oats..... "	—	—	3,961,356	—	5,367,655
5	Barley..... "	—	—	868,464	—	871,800
6	Corn..... "	—	—	195,101	—	360,758
7	Potatoes..... "	403,102	464,289	450,190	—	448,743
8	Hay and clover..... "	3,650,419	4,458,349	5,931,548	—	6,543,423
9	Wheat..... Bush.	16,723,873	32,350,269	42,223,372	—	55,572,368
10	Oats..... "	42,489,453	70,493,131	83,428,202	—	151,497,487
11	Barley..... "	11,496,038	16,844,868	17,222,795	—	22,224,366
12	Corn..... "	3,803,830	9,025,142	10,711,380	—	25,275,919
13	Potatoes..... "	47,330,187	55,268,227	53,490,857	—	55,362,635
14	Hay and clover..... Tons	3,818,641	5,055,810	7,693,733	—	7,852,731
15	Wheat..... "	16,993,265	38,820,323	31,667,529	—	36,122,039
16	Oats..... "	15,966,310	23,967,665	31,702,717	—	51,509,118
17	Barley..... "	8,170,735	11,791,408	8,611,397	—	8,889,746
18	Corn..... "	2,283,145	5,415,085	5,034,348	—	11,902,923
19	Potatoes..... "	15,211,774	13,288,510	21,396,342	—	13,842,658
20	Hay and clover..... "	38,869,900	40,446,480	69,243,597	—	85,625,315
	<b>Field Crops—</b>					
	<b>Total area..... Acres</b>	—	—	—	—	—
	<b>Total value..... \$</b>	—	—	—	—	<b>194,953,420</b>
	<b>Live Stock—</b>					
21	Horses..... No.	836,743	1,059,358	1,470,572	—	1,577,493
22	Milch cows..... "	1,251,209	1,595,800	1,857,112	—	2,408,677
23	Other cattle..... "	1,373,081	1,919,189	2,263,474	—	3,167,174
24	Sheep..... "	3,155,509	3,048,678	2,562,781	—	2,510,239
25	Swine..... "	1,366,083	1,207,619	1,733,850	—	2,353,828
26	Horses..... \$	—	—	—	—	118,279,419
27	Milch cows..... \$	—	—	—	—	69,237,970
28	Other cattle..... \$	—	—	—	—	54,197,341
29	Sheep..... \$	—	—	—	—	10,490,594
30	Swine..... \$	—	—	—	—	16,445,702
	<b>Total value..... \$</b>	—	—	—	—	<b>268,651,026</b>
	<b>Dairying—</b>					
31	Cheese, factory..... lb.	—	—	—	—	220,833,469
32	Butter, creamery..... "	—	—	—	—	36,066,739
33	Cheese, factory..... \$	1,601,738	5,464,454	9,784,288	—	22,221,430
34	Butter, creamery..... \$	—	341,478	913,591	—	7,240,972
35	Miscellaneous dairy products... \$	—	—	—	—	269,520
	<b>Total value of dairy products \$</b>	—	—	—	—	<b>29,731,922</b>
	<b>Fisheries—</b>					
	<b>Total value..... \$</b>	<b>7,573,199</b>	<b>15,817,162</b>	<b>18,977,874</b>	<b>20,407,424</b>	<b>25,737,153</b>
	<b>Minerals—</b>					
36	Gold..... oz.	105,187	63,524	45,018	133,262	1,167,216
37	Silver..... "	—	355,083 <sup>2</sup>	414,523	3,205,343	5,539,192
38	Copper..... lb.	—	3,260,424 <sup>2</sup>	9,529,401	9,393,012	37,827,019
39	Lead..... "	—	204,800 <sup>2</sup>	88,665	24,199,977	51,900,958
40	Nickel..... "	—	839,477	4,035,347	3,397,113	9,189,047
41	Pig iron..... Tons	—	24,827 <sup>2</sup>	23,891	67,268	274,376
42	Coal..... "	1,063,742 <sup>3</sup>	1,537,106	3,577,749	3,745,716	6,486,325
43	Cement..... brl.	—	69,843 <sup>2</sup>	93,479	149,090	450,394
44	Gold..... \$	2,174,412	1,313,153	930,614	2,754,774	24,128,503
45	Silver..... \$	—	347,271 <sup>2</sup>	409,549	2,149,503	3,265,354
46	Copper..... \$	—	366,798 <sup>2</sup>	1,226,703	1,021,960	6,096,581
47	Lead..... \$	—	9,216 <sup>2</sup>	3,857	721,159	2,249,387
48	Nickel..... \$	—	498,286	2,421,208	1,188,990	4,594,523
49	Pig iron..... \$	—	366,192 <sup>2</sup>	368,901	924,129	3,512,923
50	Coal..... \$	1,763,423 <sup>3</sup>	2,688,621	7,019,425	7,226,462	12,699,243
51	Cement..... \$	—	81,909 <sup>2</sup>	108,561	201,651	660,030
	<b>Total value..... \$</b>	—	<b>10,221,255<sup>4</sup></b>	<b>18,976,616</b>	<b>22,474,256</b>	<b>65,797,911</b>

<sup>1</sup> The figures of field crops (1871-1911), are for the preceding years. <sup>2</sup> 1887. <sup>3</sup> 1874. <sup>4</sup> 1886.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles:—Land, 3,603,910: Water, 125,755: Total, 3,729,665.

1906.	1911.	1916.	1917.	1918.	1919.	1920.	1921 <sup>1</sup> .	Z <sup>2</sup>
6,171,000	7,206,643	8,035,584	8,180,160	8,328,382	8,478,546	8,631,475	8,788,483	1
189,064	311,084	48,537	75,374	79,074	57,702	117,336	148,477	2
8,864,154	15,369,709	14,755,850	17,353,902	19,125,968	18,232,374	23,261,224	23,261,224	3
8,656,179	10,996,487	13,313,400	14,790,336	14,952,114	15,849,928	18,949,029	18,949,029	4
1,283,094	1,802,996	2,392,200	3,153,711	2,645,509	2,551,919	2,795,665	2,795,665	5
293,951	173,000	234,339	250,325	264,607	291,650	296,866	296,866	6
464,604	472,992	656,958	735,192	818,767	784,544	701,912	701,912	7
8,289,407	7,821,257	8,225,034	10,544,625	10,595,383	10,379,292	10,614,951	10,614,951	8
132,077,547	262,781,000	233,742,850	189,075,350	193,260,400	263,189,300	300,858,100	300,858,100	9
245,393,425	410,211,000	403,009,800	426,312,500	394,387,000	530,709,700	426,232,900	426,232,900	10
14,417,599	42,770,000	55,057,750	77,287,240	56,389,400	63,310,550	59,709,100	59,709,100	11
55,461,478	6,282,000	7,762,700	14,205,200	16,940,500	13,338,700	14,904,000	14,904,000	12
10,406,367	14,527,000	13,684,700	14,772,300	16,348,000	13,338,700	107,346,000	107,346,000	13
104,816,825	344,096,400	453,038,600	381,677,700	457,722,000	427,357,300	242,936,000	242,936,000	14
86,796,130	210,957,500	277,065,300	331,357,400	317,097,000	280,115,400	146,395,300	146,395,300	15
14,653,697	35,024,000	59,654,400	77,378,670	77,378,670	52,821,400	28,254,150	28,254,150	16
5,774,039	6,747,000	14,307,200	24,902,800	22,080,000	16,593,400	12,317,000	12,317,000	17
27,426,765	50,982,300	80,804,400	102,235,300	118,894,200	129,803,300	82,147,600	82,147,600	18
90,115,531	168,547,900	141,376,700	241,277,300	338,713,200	348,166,200	267,764,200	267,764,200	19
-	-	38,930,333	42,602,288	51,427,190	53,049,640	52,830,865	59,635,346	-
-	384,513,795	886,494,900	1,144,636,450	1,367,909,970	1,537,170,100	1,455,244,050	931,863,670	-
-	2,598,958	3,246,430	3,412,749	3,609,257	3,667,369	3,400,352	3,813,921	21
-	2,595,255	2,835,532	3,202,283	3,538,600	3,548,437	3,530,238	3,736,832	22
-	3,930,828	3,763,155	4,718,657	6,507,267	6,536,574	5,947,142	6,469,373	23
-	2,174,300	2,025,023	2,369,358	3,052,748	3,421,958	3,720,783	3,675,860	24
-	3,634,778	3,484,982	3,619,382	4,289,682	4,040,070	3,516,678	3,904,895	25
-	381,915,505	418,686,000	429,123,000	459,155,000	435,070,000	361,328,000	314,764,000	26
-	109,575,526	198,896,000	274,081,000	307,244,000	327,814,000	281,675,000	190,157,000	27
-	86,278,490	204,477,000	270,595,000	398,814,000	381,007,000	279,825,000	183,649,000	28
-	10,701,691	20,927,000	35,576,000	48,802,000	50,402,000	37,263,000	23,308,000	29
-	26,986,621	60,700,000	92,886,000	112,751,000	102,309,000	81,155,000	54,842,000	30
-	615,457,833	903,686,000	1,102,261,000	1,326,766,000	1,296,602,000	1,041,246,000	766,720,000	-
204,788,583	199,904,205	192,968,597	194,904,336	174,878,313	166,421,871	149,201,856	161,062,626	31
45,930,294	64,698,165	82,564,130	87,526,939	93,298,348	103,899,707	111,691,718	122,778,588	32
23,597,639	21,587,124	35,512,622	41,180,623	39,456,532	44,586,168	39,100,872	28,615,185	33
10,949,062	15,645,845	26,966,355	41,274,218	41,589,156	56,371,985	63,625,203	45,893,088	34
910,842	1,814,871	-	18,424,485	26,025,162	34,238,449	43,610,416	35,699,581	35
35,457,543	39,047,840	-	93,879,326	107,340,850	135,196,602	146,336,491	110,207,854	-
26,279,485	34,667,572	35,860,708	39,208,378 <sup>2</sup>	52,312,044 <sup>3</sup>	60,250,544 <sup>3</sup>	56,508,479 <sup>3</sup>	49,241,339 <sup>3</sup>	34,931,935 <sup>3</sup>
556,415	473,159	930,492	738,831	699,681	766,664	765,007	926,329	36
8,473,379	22,559,044	25,459,741	22,221,274	21,383,979	16,020,657	13,330,337	13,490,747	37
55,609,888	55,648,011	117,150,028	109,227,332	118,769,434	75,053,581	81,600,691	47,620,820	38
54,608,217	23,784,969	41,497,615	32,576,281	51,398,002	43,827,699	35,953,717	67,679,592	39
21,490,955	34,098,744	82,958,564	84,330,280	92,507,293	44,544,883	61,335,706	19,293,060	40
598,411	917,535	1,169,257	1,170,480	1,195,551	917,781	1,090,396	665,676	41
9,762,601	11,323,388	14,483,395	14,046,759	14,977,926	13,681,218	16,631,954	15,057,495	42
2,128,374	5,692,915	5,369,560	4,768,488	3,591,481	4,495,257	6,651,980	5,752,885	43
11,502,120	9,781,077	19,234,972	15,272,092	14,463,689	15,853,478	15,814,098	19,148,920	44
5,659,455	17,355,272	16,717,121	18,091,895	20,693,704	17,802,474	13,450,330	8,452,493	45
10,720,474	6,886,998	31,867,150	29,687,989	29,250,536	14,028,265	14,244,217	5,933,566	46
3,089,187	827,717	3,532,692	3,628,020	4,754,315	3,053,037	3,214,262	3,828,742	47
8,948,834	10,229,623	29,035,498	33,732,112	37,002,917	17,817,953	24,534,282	6,752,571	48
7,955,136	12,307,125	16,750,998	25,025,960	33,495,171	24,577,589	30,319,024	17,307,576	49
19,732,019	26,467,646	38,817,481	43,199,831	55,192,896	54,413,349	80,693,723	72,451,656	50
70,859	7,644,537	6,547,728	7,724,246	7,076,503	9,802,433	14,798,070	14,195,143	51
9,256,697	103,220,994	177,201,534	189,646,821	211,301,897	176,686,390	227,859,665	172,430,648	-

<sup>1</sup> The figures for 1921 are subject to revision. <sup>2</sup> Fiscal year 1916-17. <sup>3</sup> Calendar years.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

No.	Items.	1871.	1881.	1891.	1896.	1901.
1	Manufactures <sup>1</sup> —					
2	Employees..... No.	187,942	254,894	272,033	—	339,173
3	Capital..... \$	77,964,020	164,957,423	353,213,000	—	446,916,487
4	Salaries and wages..... \$	40,851,009	59,401,702	79,234,311	—	113,249,350
5	Products..... \$	221,617,773	309,731,867	368,696,723	—	481,053,375
6	Trade—					
7	Exports <sup>2</sup> ..... \$	57,630,024	83,944,701	88,671,738	109,707,805	177,431,386
8	Imports <sup>3</sup> ..... \$	84,214,388	90,488,329	111,533,954	105,361,161	177,930,919
9	<b>Total</b> ..... \$	<b>141,844,412</b>	<b>174,433,030</b>	<b>200,205,692</b>	<b>215,068,966</b>	<b>355,362,305</b>
10	Exports, domestic—					
11	Wheat..... Bush.	1,748,977	2,523,673	2,108,216	9,919,542	9,739,758
12	Wheat flour..... Brl.	306,339	439,728	296,784	186,716	1,118,700
13	Oats..... Bush.	542,386	2,926,532	260,560	968,137	8,155,063
14	Hay..... Tons	23,487	168,381	65,083	214,640	252,977
15	Bacon and hams, shoulders and sides..... Cwt.	103,444	103,547	75,541	537,361	1,055,495
16	Butter..... Lb.	15,439,266	17,649,491	3,768,101	5,889,241	16,335,528
17	Cheese..... \$	8,271,439	49,255,523	106,202,140	164,689,123	195,926,397
18	Wheat..... \$	1,981,917	2,543,420	1,583,034	5,771,521	6,871,939
19	Wheat flour..... \$	1,605,449	2,173,108	1,388,378	718,493	4,015,226
20	Oats..... \$	231,227	1,191,873	129,917	273,861	2,490,521
21	Hay..... \$	290,217	1,813,208	559,489	1,976,431	2,097,882
22	Bacon and hams, shoulders and sides..... \$	1,018,918	758,334	628,469	4,381,968	11,778,446
23	Butter..... \$	3,065,234	3,573,034	602,175	1,032,089	3,295,663
24	Cheese..... \$	1,103,906	5,510,443	9,508,800	13,956,571	20,696,951
25	Gold <sup>4</sup> ..... \$	163,037	767,318	554,126	1,099,053	24,445,156
26	Silver..... Oz.	—	—	—	2,508,233	4,022,019
27	Copper <sup>5</sup> ..... Lb.	6,246,000	30,604,000	10,904,495	3,573,182	26,345,776
28	Nickel..... \$	—	—	5,352,043	6,996,540	9,537,558
29	Coal..... Tons	318,287	420,055	833,684	1,025,060	1,888,538
30	Silver..... \$	505,261	34,494	238,367	1,595,543	2,420,750
31	Copper..... \$	120,121	150,412	505,196	194,771	2,659,261
32	Nickel..... \$	—	—	240,499	486,651	958,365
33	Coal..... \$	662,451	1,123,091	2,916,465	3,249,069	5,307,060
34	Exports, domestic—					
35	Vegetable products (except chemicals, fibres and wood)..... \$	—	—	13,742,557	14,606,735	25,541,567
36	Animals and their products (except chemicals and fibres)..... \$	—	—	36,399,140	48,763,906	68,465,332
37	Fibres, textiles and textile products..... \$	—	—	872,628	2,104,013	1,880,539
38	Wood, wood products and paper..... \$	—	—	25,351,085	28,772,187	33,099,915
39	Iron and its products..... \$	—	—	556,527	1,188,254	3,778,897
40	Non-ferrous metals and their products..... \$	—	—	1,618,955	3,843,475	33,395,096
41	Non-metallic minerals and their products..... \$	—	—	3,988,584	4,368,013	7,356,324
42	Chemicals and allied products..... \$	—	—	851,211	481,661	791,975
43	All other commodities..... \$	—	—	5,291,051	5,579,561	3,121,741
44	<b>Total exports, domestic</b> ..... \$	<b>57,630,024</b>	<b>83,944,701</b>	<b>88,671,738</b>	<b>109,797,805</b>	<b>177,431,386</b>
45	Imports for consumption—					
46	Vegetable products (except chemicals, fibres and wood)..... \$	—	—	24,212,140	22,742,835	38,036,757
47	Animals and their products (except chemicals and fibres)..... \$	—	—	8,030,862	7,599,802	14,022,896
48	Fibres, textiles and textile products..... \$	—	—	28,670,141	27,421,519	37,284,752
49	Wood, wood products and paper..... \$	—	—	5,203,490	4,787,288	8,196,901
50	Iron and its products..... \$	—	—	15,142,615	13,393,762	29,955,936
51	Non-ferrous metals and their products..... \$	—	—	3,810,626	2,967,439	7,159,142
52	Non-metallic minerals and their products (except chemicals)..... \$	—	—	14,139,024	13,736,879	21,255,403
53	Chemicals and allied products..... \$	—	—	3,697,810	3,840,806	5,692,564
54	All other commodities..... \$	—	—	8,577,246	8,870,831	16,326,568
55	<b>Total imports</b> ..... \$	<b>84,214,388</b>	<b>90,488,329</b>	<b>111,533,954</b>	<b>105,361,161</b>	<b>177,930,919</b>
56	Steam Railways—					
57	Miles in operation..... No.	2,695	7,331	13,838	16,270	18,140
58	Capital..... \$	257,035,188	284,419,293	632,061,410	697,212,941	816,110,847
59	Passengers..... No.	5,190,166	6,943,671	13,222,568	13,059,023	18,385,722
60	Freight..... Tons	3,670,836	12,065,323	21,753,021	24,248,294	34,571,371
61	Earnings..... \$	19,470,539	27,987,509	48,192,099	50,374,295	75,575,549
62	Expenses..... \$	15,775,532	20,121,418	34,960,449	34,893,337	50,282,846

<sup>1</sup> The statistics of manufactures in 1871, 1881, 1917, 1918 and 1919, include works employing less than five hands, while those of 1891, 1901 and 1911 are for works employing five hands and over, except in the case of butter and cheese factories, flour and grist mills, electric light plants, lumber, lath and ship

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1906.	1911.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
383,920	515,203	—	674,910	678,337	682,483	—	—	1
833,916,155	1,247,583,609	—	2,786,649,727	3,034,301,915	3,230,686,368	—	—	2
162,155,578	241,008,416	—	550,192,069	629,790,644	689,435,709	—	—	3
706,446,578	1,165,975,639	—	3,015,577,940	3,458,036,975	3,520,731,589	—	—	4
235,483,956	274,316,553	741,610,638	1,151,375,768	1,540,027,788	1,216,443,806	1,239,492,098	1,189,163,701	5
283,740,280	452,724,603	508,201,134	846,450,878	963,532,578	919,711,705	1,064,528,123	1,240,158,882	6
519,224,236	727,041,156	1,249,811,772	1,997,826,646	2,593,569,366	2,136,155,511	2,304,020,221	2,429,322,583	
40,399,402	45,802,115	157,745,469	189,643,846	150,392,037	41,808,897	77,978,037	129,215,157	7
1,532,014	3,049,046	6,400,214	7,425,723	9,931,148	9,205,439	8,863,068	6,017,032	8
2,700,303	5,431,662	26,816,322	66,368,832	54,877,882	17,879,783	10,768,872	14,321,048	9
206,714	326,132	255,407	198,914	440,368	492,208	218,561	179,398	10
1,029,079	598,745	1,536,517	2,116,166	2,078,330	1,246,888	2,236,426	982,338	11
34,031,525	3,142,632	3,441,183	7,990,435	4,926,154	13,659,157	17,612,605	9,739,414	12
215,834,543	181,895,724	168,961,583	180,733,426	169,530,753	152,207,037	126,395,777	133,620,340	13
33,658,391	45,521,134	172,896,445	244,394,586	366,341,565	96,985,056	185,044,806	310,952,138	14
6,179,825	13,854,790	35,767,044	47,473,474	95,896,492	99,931,659	94,262,928	66,520,490	15
1,083,347	2,144,846	14,637,849	33,918,479	37,644,293	15,193,527	9,349,455	14,152,033	16
1,529,941	2,723,291	5,849,426	4,219,091	5,073,814	7,666,491	4,087,670	4,210,594	17
12,086,868	8,526,332	27,090,113	43,778,034	60,082,494	40,242,175	70,123,580	31,492,407	18
7,075,539	744,288	1,018,769	2,491,992	2,000,467	6,140,864	9,844,359	5,128,831	19
24,433,169	20,739,507	26,670,500	36,721,136	36,602,504	35,223,983	36,336,863	37,146,722	20
12,991,916	5,344,465	16,870,394	19,671,026	13,688,700	9,202,033	5,974,334	3,038,779	21
7,261,527	33,731,010	27,794,566	23,844,261	21,960,827	19,759,478	12,379,052	13,291,050	22
44,282,348	55,005,342	111,045,300	126,439,800	77,534,900	65,612,400	42,003,300	36,167,900	23
23,959,841	34,767,523	70,443,000	82,620,400	83,049,900	79,164,400	44,140,700	27,018,300	24
1,820,511	2,315,171	1,971,124	1,899,185	1,902,010	1,826,639	2,120,138	2,177,202	25
4,310,528	17,269,168	14,298,351	15,870,803	18,428,571	19,519,642	14,255,601	11,127,432	26
7,143,633	5,575,033	14,670,073	22,744,825	10,710,705	8,684,191	5,253,218	4,336,972	27
2,166,936	3,842,332	7,714,769	8,925,554	9,029,535	11,170,359	9,039,221	9,405,291	28
4,643,198	6,014,095	6,032,765	6,817,034	8,684,038	10,169,722	13,183,666	16,501,478	29
55,828,252	84,556,886	257,249,193	386,011,190	587,431,967	288,893,218	416,122,771	482,924,672	30
84,670,644	69,693,263	138,375,083	157,577,393	209,496,712	244,990,826	314,017,944	188,359,937	31
2,602,903	1,818,931	15,097,691	11,979,554	30,804,815	28,030,381	34,028,314	18,783,884	32
45,716,762	56,334,695	83,116,282	103,652,217	116,384,814	154,569,154	213,913,944	284,561,478	33
4,705,296	9,884,346	66,127,099	63,310,063	64,837,223	81,910,926	81,785,829	76,500,741	34
28,455,786	34,000,996	66,036,542	90,263,731	89,523,168	79,260,732	54,976,413	45,939,377	35
7,817,475	10,038,493	11,879,741	14,842,774	19,984,236	26,662,304	30,342,926	40,121,892	36
1,784,800	2,900,379	15,948,480	52,592,935	49,131,084	56,799,799	22,581,049	19,582,051	37
4,002,038	5,088,564	87,780,527	171,145,911	372,433,769	255,326,466	71,722,908	32,389,669	38
235,483,956	274,316,553	741,610,638	1,151,375,768	1,540,027,788	1,216,443,806	1,239,492,098	1,189,163,701	
50,330,667	79,214,342	95,426,024	125,870,668	148,958,888	157,506,654	242,075,389	261,081,364	39
23,616,835	30,671,908	38,657,514	63,834,522	60,570,165	41,505,094	95,098,743	61,722,390	40
59,292,868	87,916,282	96,911,485	142,868,038	152,311,282	178,190,241	231,559,877	243,608,342	41
14,341,947	26,851,936	18,277,420	23,931,265	28,470,715	35,399,852	43,183,267	57,449,384	42
49,436,840	91,968,180	92,065,895	153,251,379	195,248,713	192,527,377	186,319,876	245,625,703	43
17,527,922	27,655,874	29,448,661	39,464,210	46,203,053	41,649,431	52,103,913	55,553,902	44
33,757,284	53,335,826	53,427,531	79,227,545	129,788,504	135,250,417	121,956,176	206,095,113	45
8,251,378	12,489,776	19,258,326	28,672,998	27,840,576	34,282,647	29,886,102	36,334,612	46
27,184,539	42,620,479	65,448,278	189,330,253	174,140,682	103,399,992	62,344,780	72,688,072	47
283,749,280	452,724,603	508,201,134	846,450,878	963,532,578	919,711,705	1,064,528,123	1,240,158,882	
21,353	25,400	37,434	38,604	38,879	38,896	39,384	39,841	48
1,035,881,629	1,528,693,201	1,893,125,774	1,935,119,991	1,999,880,494	2,009,209,510	2,170,030,128	2,164,687,636	49
27,939,782	37,097,718	43,503,459	48,106,530	44,948,638	43,754,194	51,318,422	46,793,251	50
57,966,713	79,884,282	109,659,088	121,916,272	127,543,687	116,699,572	127,429,154	103,131,132	51
125,322,865	188,733,494	261,888,654	310,771,479	330,220,150	382,976,901	492,101,104	458,008,891	52
87,129,434	131,034,785	180,542,259	222,890,637	273,955,436	341,866,509	478,248,154	422,581,205	53

mills, lime kilns, brick and tile works and fish preserved. <sup>2</sup> Exports of domestic merchandise only.  
<sup>3</sup> Imports of merchandise for home consumption. <sup>4</sup> The figures for 1919 are for gold exported to foreign countries only. <sup>5</sup> Copper, fine, contained in ore, matte, regulus, etc. <sup>6</sup> Year 1876. <sup>7</sup> Year 1875.



## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

No.	Items.	1871.	1881.	1891.	1896.	1901.
1	Electric Railways <sup>1-2</sup> —					
2	Miles in operation..... No.	—	—	—	—	675
3	Capital..... \$	—	—	—	—	—
4	Passengers..... No.	—	—	—	—	120,934,656
5	Freight..... Tons	—	—	—	—	287,926
6	Earnings..... \$	—	—	—	—	5,768,283
7	Expenses..... \$	—	—	—	—	3,435,162
8	Canals—					
9	Passengers carried..... No.	100,377	118,136	146,336	151,342	190,428
10	Freight..... Tons	3,955,621	2,853,230	2,902,526	7,991,073	5,665,259
11	Shipping (sea-going)—					
12	Entered..... Tons	2,521,573	4,032,946	5,273,935	5,895,360	7,514,732
13	Cleared..... “	2,594,460	4,071,391	5,421,261	5,563,464	7,028,330
14	<b>Total</b> ..... “	<b>5,116,033</b>	<b>8,104,337</b>	<b>10,695,196</b>	<b>11,458,824</b>	<b>14,543,062</b>
15	Telegraphs, Government, miles of line	—	1,947	2,699	2,786	5,744
16	Telegraphs, other, miles of line.....	—	—	27,866	28,949	30,194
17	Telephones..... No.	—	—	—	—	63,192
18	Motor vehicles..... “	—	—	—	—	—
19	Postal—					
20	Money orders issued..... \$	4,546,434	7,725,212	12,478,178	13,081,861	17,956,258
21	Revenue..... \$	803,637	1,344,970	2,515,823	2,971,653	3,421,192
22	Expenditure..... \$	994,876	1,876,658	3,161,676	3,752,805	3,837,376
23	Revenue..... \$	19,335,561	29,635,298	38,579,311	36,618,591	52,514,701
24	Expenditure..... \$	15,623,082	25,502,554	36,343,568	36,949,142	46,866,368
25	Gross debt..... \$	115,492,683	199,861,537	289,899,230	325,717,537	354,732,433
26	Assets..... \$	37,786,165	44,465,757	52,090,199	67,220,104	86,252,429
27	Net debt..... \$	77,706,518	155,395,780	237,809,031	258,497,433	268,480,004
28	Chartered Banks—					
29	Capital paid up..... \$	37,095,340	59,534,977	60,700,697	62,043,173	67,035,615
30	Assets..... \$	125,273,631	200,613,879	269,307,032	320,937,643	531,829,324
31	Liabilities (excluding capital and reserves)..... \$	80,250,974	127,176,249	187,332,325	232,338,086	420,003,743
32	Deposits <sup>3</sup> ..... \$	56,287,391	94,346,481	148,396,968	193,616,049	349,573,327
33	Savings Banks—					
34	Deposits in Post Office..... \$	2,497,260	6,208,227	21,738,648	28,932,930	39,950,813
35	Government..... \$	2,072,037	9,628,445	17,661,378	17,866,389	16,098,144
36	Special..... \$	5,766,712	7,685,888	10,982,232	14,459,833	19,125,097
37	Loan Companies <sup>6</sup> —					
38	Assets..... \$	8,392,464	73,906,638	125,041,146	143,887,377	158,523,307
39	Liabilities..... \$	8,392,464	71,965,017	123,915,704	143,296,284	158,523,307
40	Deposits..... \$	2,399,136	13,460,268	18,482,959	19,404,878	20,756,910
41	Trust Companies—					
42	Shareholders' assets..... \$	—	—	—	—	—
43	Investments on trust account..... \$	—	—	—	—	—
44	Dominion Fire Insurance—					
45	Amount at risk, Dec. 31..... \$	228,453,784	462,210,968	759,602,191	\$45,574,352	1,038,687,619
46	Premium income for year..... \$	2,321,716	3,827,116	6,168,716	7,075,850	9,650,348
47	Provincial Fire Insurance—					
48	Amount at risk Dec. 31..... \$	—	—	—	—	—
49	Premium income for year..... \$	—	—	—	—	—
50	Dominion Life Insurance—					
51	Amount at risk Dec. 31..... \$	45,825,935	103,290,932	261,475,229	327,814,465	463,769,034
52	Premium income for year..... \$	1,852,974	3,094,689	8,417,702	10,604,577	15,189,854
53	Provincial Life Insurance—					
54	Amount at risk Dec. 31..... \$	—	—	—	—	—
55	Premium income for year..... \$	—	—	—	—	—

<sup>1</sup> Statistics for 1918 do not include Montreal Tramways.<sup>2</sup> Calendar years 1920 and 1921.<sup>3</sup> Including amounts deposited elsewhere than in Canada from 1901 to 1921.<sup>4</sup> Figures subject to revision.<sup>5</sup> Including Building Societies and Trust Companies (1871-1911).<sup>6</sup> Motor vehicles in 6 provinces numbered 2,130 in 1907.<sup>7</sup> Active assets only.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

1906.	1911.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
814	1,224	1,674	1,744	1,616	1,696	1,699	1,687	1
—	111,532,347	154,895,584	161,234,739	167,253,093	171,894,556	170,826,404	177,187,436	2
237,655,074	426,296,792	580,094,167	629,441,997	487,365,456	686,124,263	804,711,333	719,305,441	3
506,024	1,228,362	1,936,674	2,333,539	2,497,530	2,474,892	2,691,150	2,285,886	4
10,966,871	20,356,952	27,416,285	30,237,664	24,299,890	35,696,532	47,047,246	44,536,833	5
6,675,037	12,096,134	18,099,906	20,098,634	17,535,975	26,839,070	37,242,483	35,945,316	6
256,500	304,904	263,648	244,919	212,143	262,056	230,468	230,129	7
10,523,185	38,030,353	23,583,491	22,238,935	18,883,619	9,995,266	8,735,383	9,407,021	8
8,895,353	11,919,339	12,616,927	14,789,781	15,780,160	11,694,613	12,010,374	12,516,503	9
7,948,076	10,377,847	12,210,723	14,477,293	17,006,967	13,566,780	13,234,380	12,400,226	10
<b>16,843,429</b>	<b>22,297,186</b>	<b>24,827,650</b>	<b>29,267,074</b>	<b>32,787,127</b>	<b>25,261,393</b>	<b>25,244,754</b>	<b>24,916,729</b>	
6,829	8,446	10,699	10,924	10,950	11,428	11,454	11,207	11
31,506	33,905	38,552	39,196	39,438	37,771	40,939	41,621	12
—	302,759	548,421	604,136	662,330	724,500	856,266	902,090	13
7	21,519	123,464	197,799	275,746	341,316	407,064	465,378	14
37,355,673	70,614,862	94,469,871	119,695,535	142,959,168	142,375,809	159,224,937	173,523,322	15
5,993,343	9,146,952	18,858,410	20,902,384	21,345,394	21,602,713	24,449,917	26,331,119	16
4,921,577	7,954,223	16,009,139	16,300,579	18,046,558	19,273,584	20,774,385	24,661,262	17
80,139,360	117,780,410	172,147,838	232,701,294	260,778,953	312,946,747	349,746,335	434,386,537	18
67,240,461	87,774,198	130,350,727	148,599,343	178,284,313	232,731,283	303,843,930	361,118,145	19
392,269,680	474,941,487	936,987,802	1,382,003,268	1,863,335,899	2,460,183,021	3,041,529,587	2,602,482,117	20
125,226,702	134,899,435	231,831,631	502,816,970	671,451,836	647,598,202	792,660,963	561,603,133	21
267,042,978	340,042,052	615,156,171	879,186,298	1,191,884,063	1,812,584,819	2,248,868,624	2,340,878,983	22
91,035,604	103,009,256	113,175,353	111,637,755	110,618,504	115,004,960	123,617,120	129,096,339	23
878,512,076	1,303,131,260	1,839,286,709	2,111,559,555	2,432,331,418	2,754,568,118	3,064,133,843	2,841,782,079	24
713,790,553	1,097,661,393	1,596,905,337	1,866,228,236	2,184,359,820	2,495,582,568	2,784,668,618	2,556,454,190	25
605,968,513	980,433,788	1,418,035,429	1,643,302,020	1,912,395,780	2,189,428,888	2,438,079,712	2,264,586,736	26
45,736,488	43,330,579	40,008,418	42,582,479	41,283,479	41,654,920	31,605,594	29,010,619	27
16,174,134	14,655,564	13,520,009	13,633,610	12,177,283	11,402,098	10,729,218	10,150,189	28
27,399,194	34,770,386	40,405,037	44,139,978	42,000,543	46,799,877	53,118,053	58,576,771	29
232,076,447	389,701,988	70,872,297	69,676,223	69,995,036	74,520,021	90,413,261	96,698,809	30
232,076,447	389,701,988	70,872,297	69,676,223	69,995,224	74,520,021	90,413,261	96,698,809	31
23,046,194	33,742,513	8,987,720	8,934,825	7,802,539	9,347,096	15,257,840	15,868,926	32
—	—	7,826,943	7,656,292	8,836,137	10,007,941	10,224,252	10,238,236	33
—	—	47,669,243	49,291,347	68,938,236	73,133,017	73,704,706	88,036,507	34
1,443,902,244	2,279,868,346	3,720,058,236	3,986,197,514	4,523,514,841	4,923,024,381	5,969,872,278	5,995,928,802	35
14,687,963	20,575,255	27,783,852	31,246,530	35,954,405	40,031,474	50,527,937	47,199,763	36
—	—	849,915,678	891,299,821	1,000,541,101	1,004,942,977	1,054,105,011	1,134,639,938	37
—	—	3,902,504	4,081,815	4,185,851	4,302,492	5,216,795	5,010,302	38
656,260,900	950,220,771	1,422,179,632	1,585,042,563	1,785,061,273	2,187,837,317	2,657,025,493	2,934,844,248	39
22,364,456	31,619,626	48,093,105	54,843,609	61,641,047	74,708,509	90,218,047	98,866,458	40
—	—	348,097,229	415,870,273	239,126,190	223,853,792	174,740,215	202,863,578	41
—	—	5,311,003	7,397,193	4,821,839	4,407,833	3,282,669	4,371,301	42

## NOTE.

In the foregoing Summary the statistics of immigration, fisheries (1871-1917), trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Office and Government Savings Banks relate to the fiscal years ended June 30 up to 1906, and from that on to the years ended March 31. Agricultural, dairying, fisheries (1917-21), mineral, manufacturing, banking, insurance, loan and trust companies' statistics relate to the calendar years and railway statistics to the years ended June 30, 1871-1919, and to the calendar years 1920 and 1921. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the calendar years for other lines.



# I.—THE CONSTITUTION AND GOVERNMENT OF CANADA.

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The Dominion of Canada is the largest in area and the most populous of the great self-governing Dominions of the British Empire, which also include the Commonwealth of Australia, the Union of South Africa, the Dominion of New Zealand and the island colony of Newfoundland (with Labrador). These Dominions enjoy responsible government of the British type, administered by Executive Councils (or Cabinets) acting as advisors to the representative of the Sovereign, themselves responsible to and possessing the confidence of the representatives elected to Parliament by the people, and giving place to other persons more acceptable to Parliament whenever that confidence is shown to have ceased to exist.

Of these Dominions, Canada, Australia and South Africa extend over enormous areas of territory, the first two approximating in area to Europe. Each section has its own problems and its own point of view, so that local parliaments for each section, as well as the central parliament for the whole country, are required. These local parliaments, established when transportation and communication were more difficult and expensive than at present, were chronologically prior to the central body, to which on its formation they either resigned certain powers, as in the case of Australia, or surrendered all their powers with certain specified exceptions, as in Canada and South Africa. Of such local Parliaments, Canada at the present time has nine, Australia six and South Africa four.

As regards the division of powers between central and local legislatures, Canada stands midway between the two more recently formed federations of the Empire. The founders of the Dominion of Canada, constituted as it was under the shadow of the great Civil War in the United States, aimed at settling once for all the issues of State rights, State sovereignty and the right of the State to secede from the Union, which had occasioned so much bloodshed in the neighbouring republic. They created, therefore, a strong federation where the residue of power appertained to the central rather than to the local authorities and where the central power could legally disallow, in the general interest of Canada, the legislation of the local Parliaments, even when these were admittedly acting within their reserved powers.

It is a curious paradox of political science that whereas in Canada, a bi-lingual country inhabited by peoples of different races and religions, it should have been possible to establish a strong central government, the founders of the Commonwealth of Australia, which had a practically homogeneous population throughout the six States of the Commonwealth, should only have been able to establish a relatively weak federation of the American type with the residual powers in the hands of the States, among which all surplus Commonwealth revenue was to be divided.



Again, in the South African federation, also formed in a bilingual country where the white population of one province was almost altogether British, of another almost wholly Dutch, of the other two nearly equally divided, we find a strong federation where the powers of local governments are more restricted than in our own country. The decisive factor necessitating the formation of a strong, central Government seems to have been the presence in South Africa of a native population vastly outnumbering the whites.

Besides the Dominions above enumerated, the Irish Free State may now (1922) be said to possess full Dominion status, while the six counties of Northeast Ulster may also be regarded as a separate self-governing colony. The great Empire of India has internationally been accepted as a member of the League of Nations, and in its internal administration has been placed on the road, formerly traversed by the Dominions which are now fully self-governing, towards responsible government. Indeed, the whole evolution of the Empire, throughout all its parts which are more than mere fortresses like Gibraltar or trading stations like Hong Kong, is in the direction of responsible government, to be attained in the dependencies as it has been in what used to be called the colonies, by the gradual extension of self-government in proportion to the growing capacities of their respective populations. It is the recognized aim of British administrators, by the extension of educational facilities and by just administration, to develop these capacities to the utmost, so that in the dependencies, as well as in the Dominions and in the Mother Country, the constitutional history of the future may be a record of "freedom slowly broadening down from precedent to precedent."

It is the purpose of this article to relate as briefly as possible, the process of this development of free government in the Dominion of Canada.

**The French Régime.**—The settlement of Canada commenced at a time when the extension of European trade and commerce throughout the world was being mainly carried on by Chartered Companies of merchants belonging to various nations, more particularly England, France and Holland. These Companies each tried to monopolize the trade of the regions in which they established themselves, receiving from their sovereign charters which, theoretically at least, gave them a monopoly so far as their compatriots were concerned, while against foreign competition they maintained their position with the sword, even when their respective mother countries, thousands of miles and months of time distant, were at peace. Among such companies of this period were the English and Dutch East India Companies, the Guinea Company, the Russia Company, the Virginia Company, and a little later, the Hudson's Bay Company. Similarly we find in the earliest stage of French enterprise in Canada that several short-lived companies successively possessed a monopoly of trade and employed such men as Champlain as governors and explorers of the opportunities of the new territories. The charters

of these companies were, however, cancelled for violation of their terms, and at last in 1627, the monopoly of trade and the right to make grants of land was conferred upon the Company of One Hundred Associates, in consideration of its undertaking to settle the country and support missionaries to christianize the Indians. Governmentally, therefore, the first stage in Canadian history may be said to have been the autocratic government of a trading company. This company, however, failed to live up to its agreement and its charter was cancelled in 1663, when Canada became a royal province, governed like an ordinary French province of those days, by a Governor to whom as personal representative of the King, were entrusted the general policy of the country, the direction of its military affairs and its relations with the Indian tribes. The Bishop, as the head of the Church, was supreme in matters affecting religion, and the Intendant, acting under the authority of the King, not of the Governor, was responsible for the administration of justice, for finance and for the direction of local administration. A Superior Council also existed, with certain administrative powers which were more formal than real. This system continued until the end of the French régime.

**The English Colony.**—From the capitulation of Quebec on Sept. 18, 1759, and of Montreal on Sept. 8, 1760, to the signature of the Treaty of Paris on Feb. 10, 1763, Canada was ruled by British military officers who instituted courts which applied French law, and administered the country as an occupied territory, the final disposition of which was as yet unsettled.

Upon the final surrender of the country by France under the Treaty of Paris, a Royal Proclamation of Oct. 7, 1763, defined the frontiers of the new Province of Quebec, and provided that as soon as circumstances would admit, General Assemblies should be summoned, with power to enact laws for the public welfare and good government of the colony. In the meantime, Courts were constituted for "dealing with civil and criminal cases according to the laws of England," with an appeal to the Privy Council. Under the Quebec Act of 1774, passed with the purpose of conciliating the new colonies at a time when the old colonies were falling off from their allegiance, the use of the old French civil law was resumed, while English criminal law continued to govern throughout the Province of Quebec, which was now extended to the banks of the Ohio and the Mississippi. These boundaries were, however, abandoned at the Treaty of Versailles, 1783, when the Great Lakes became the dividing line. The influx of the United Empire Loyalists, English-speaking people accustomed to English laws, necessitated the division of the colony and the establishment of representative institutions. The Constitutional Act was passed in 1791, dividing the Canada of those days (the St. Lawrence valley) into two provinces, establishing in each province a nominated Legislative Council and an elective Legislative Assembly. Under this Act, upon which the government of Canada was based throughout half a century, "the Executive was (through Crown revenue and military grants from the Home Government) financially, and worse still,

constitutionally independent, and the House of Assembly, in seeking vaguely to cure a disease which it had not in reality diagnosed, frequently overstepped its sphere, with the result that it was dissolved time after time.”—(Lefroy, *Constitutional Law of Canada*, pp. 20-21).

The Constitutional Act was at first accepted as an improvement on the previously existing method of Government, but as time went on, the increasing population and wealth of the provinces, combined with the narrow and selfish policy of the privileged few, led to frequent clashes between the Executive and the Assembly, complicated in Lower Canada by the difference of races. In 1837, a rebellion in each province, though speedily stamped out, led to the appointment of Lord Durham by the Home Government as a special commissioner clothed with more extensive powers than had ever before been held by a representative of the Crown in British North America, as he was governor-in-chief of the five provinces of Upper Canada, Lower Canada, New Brunswick, Nova Scotia and Prince Edward Island, high commissioner for the adjustment of certain important questions respecting the form of and the future government of Upper and Lower Canada, and high commissioner and governor-general of all the provinces on the continent, and of Prince Edward Island and Newfoundland.

The famous report made by Lord Durham to Parliament is almost universally regarded as the greatest political document in our history. He saw clearly the necessity of re-establishing harmony between the executive and the legislative branches of the government by making the former, as in England, responsible to the latter. He insisted also upon the desirability of establishing a free democratic system of municipal government, by participation in which citizens would secure a training which would be of use in fitting them for the wider duties of public life. Upper and Lower Canada were to be united under a single Parliament, and in the Act provision was to be made for the voluntary admission to the union of the other British North American Provinces.

While Lord Durham was disavowed by the Home Government, his report formed the basis of the Act of Union of 1841, which united Upper and Lower Canada under a single Parliament, in which each province was equally represented. This equality of representation, applied to provinces of differing race, religion and institutions, finally became unworkable; deadlock became the parent of Confederation, under which each province could legislate on its own local affairs, while a common Parliament was established for all the provinces agreeing to come into Confederation.

**Confederation.**—While suggestions for the union of the British North American provinces date as far back as 1789, the first legislative action looking to this end was taken by the Assembly of Nova Scotia in 1861. In 1864 delegates from Nova Scotia, New Brunswick and Prince Edward Island assembled in Charlottetown to confer in reference to a union of these provinces. A second convention, at which the province of Canada was represented, met in Quebec on Oct. 10,



1864, at which seventy-two resolutions, which afterwards formed the basis of the British North America Act, were adopted and referred to the respective legislatures for their concurrence, which was finally given. The British North America Act received the Royal Assent on March 29, 1867, and came into force on July 1 of that year.

**Constitution of Canada.**—In the preamble to the British North America Act it is stated that the provinces of Canada, Nova Scotia and New Brunswick “have expressed their desire to be federally united into one Dominion, with a Constitution similar in principle to that of the United Kingdom.” This declaration throws a flood of light upon our form of government. Our constitution is not an imitation of that of the United States, it is the British Constitution federalized. Like the British and unlike the American Constitution, it is not a written constitution. The many unwritten conventions of the British Constitution are also recognized in our own; what we have in the British North America Act is a written delimitation of the respective powers of the Dominion and Provincial Governments, and an enactment of the terms of the Confederation Agreement. The British North America Act simply divides the sovereign powers of the State between the provincial and the central authorities.

The British North America Act declares that the executive government of Canada shall continue to be vested in the sovereign of the United Kingdom (sec. 9), represented for federal purposes by the Governor-General, just as for provincial purposes by the Lieutenant-Governor. The Governor-General is advised by the King's Privy Council of Canada, a committee of which constitutes the ministry of the day.

The Dominion Parliament consists of the King, the Senate and the House of Commons. It must meet at least once a year, so that twelve months do not elapse between the last meeting in one session and the first meeting in the next. Senators, 96 in number, who are appointed for life by the Governor-General in Council, must be 30 years of age, British subjects, residents of the province for which they are appointed, and possess \$4,000 over and above their liabilities. Members of the House of Commons (235 in 1921, but subject to increase as a result of the census of that year), are elected by the people for the duration of the Parliament, which may not be longer than five years. The Speaker of the Senate is chosen by the Governor-General in Council, the Speaker of the House of Commons by the members of that House. In the Senate, 15 constitute a quorum, in the House of Commons, 20.

**Dominion Finance.**—Among the most important provisions of the British North America Act are those relating to the appropriation of public money and the raising of taxes for Dominion purposes. The House of Commons has the sole right of initiating grants of public money and of directing and limiting appropriations, yet the House of Commons must not (sec. 54) adopt or pass any vote, bill, resolution or address for the payment of any part of the public funds for any



purpose that has not first been recommended to the House by message from the Governor-General in Council during the session in which such vote or bill is proposed. This rule is of the most vital importance in promoting public economy, as it eliminates all possibility of private members combining to secure expenditures of public money in their constituencies, and leaves to the executive authority the initiation of all legislation requiring the expenditure of public funds. This rule is also operative in the Provincial Legislatures.

**Powers of Parliament.**—The powers of the Dominion Parliament include all subjects not assigned exclusively to the provincial legislatures. More especially, under section 91 it has exclusive legislative authority in all matters relating to the following: public debt and property; regulation of trade and commerce; raising of money by any mode of taxation; borrowing of money on the public credit; postal service; census and statistics; militia, military and naval service and defence; fixing and providing for salaries and allowances of the officers of the government; beacons, buoys and light-houses; navigation and shipping; quarantine and the establishment and maintenance of marine hospitals; sea-coast and inland fisheries; ferries on an international or interprovincial frontier; currency and coinage; banking, incorporation of banks, and issue of paper money; savings banks; weights and measures; bills of exchange and promissory notes; interest; legal tender; bankruptcy and insolvency; patents of invention and discovery; copyrights; Indians and lands reserved for Indians; naturalization and aliens; marriage and divorce; the criminal law, except the constitution of courts of criminal jurisdiction, but including the procedure in criminal matters; the establishment, maintenance and management of penitentiaries; such classes of subjects as are expressly excepted in the enumeration of the classes of subjects by this Act exclusively assigned to the legislatures of the Provinces.

**Powers of Provincial Legislatures.**—Under section 92, the Legislature in each Province may exclusively make laws in relation to the following matters: amendment of the constitution of the Province, except as regards the Lieutenant-Governor; direct taxation within the province; borrowing of money on the credit of the Province; establishment and tenure of provincial offices and appointment and payment of provincial officers; the management and sale of public lands belonging to the province and of the timber and wood thereon; the establishment, maintenance and management of public and reformatory prisons in and for the province; the establishment, maintenance and management of hospitals, asylums, charities and eleemosynary institutions in and for the province, other than marine hospitals; municipal institutions in the province; shop, saloon, tavern, auctioneer and other licenses issued for the raising of provincial or municipal revenue; local works and undertakings other than inter-provincial or international lines of ships, railways, canals, telegraphs, etc., or works which, though wholly situated within one province, are declared by the Dominion Parliament to be for the general advantage

either of Canada or of two or more provinces; the incorporation of companies with provincial objects; the solemnization of marriage in the province; property and civil rights in the province; the administration of justice in the province, including the constitution, maintenance and organization of provincial courts both of civil and criminal jurisdiction, and including procedure in civil matters in these courts; the imposition of punishment by fine, penalty, or imprisonment for enforcing any law of the province relating to any of the aforesaid subjects; generally all matters of a merely local or private nature in the province.

**Education.**—Further, in and for each province the Legislature may, under section 93, exclusively make laws in relation to education, subject to the following provisions.—

“(1) Nothing in any such law shall prejudicially affect any right or privilege with respect to denominational schools which any class of persons have by law in the province at the union.

(2) All the powers, privileges and duties at the union by law conferred and imposed in Upper Canada on the separate schools and school trustees of the Queen's Roman Catholic subjects shall be and the same are hereby extended to the dissentient schools of the Queen's Protestant and Roman Catholic subjects in Quebec.

(3) Where in any province a system of separate or dissentient schools exists by law at the union or is thereafter established by the legislature of the province, an Appeal shall lie to the Governor-General in Council from any act or decision of any provincial authority affecting any right or privilege of the Protestant or Roman Catholic minority of the Queen's subjects in relation to education.

(4) In case any such provincial law as from time to time seems to the Governor-General in Council requisite for the due execution of the provisions of this Section is not made, or in case any decision of the Governor-General in Council on any appeal under this Section is not duly executed by the proper provincial authority in that behalf, then and in every such case, and as far only as the circumstances of each case require, the Parliament of Canada may make remedial laws for the due execution of the provisions of this Section and of any decision of the Governor-General in Council under this Section.”

The purpose of these sections was to preserve to a religious minority in any province the same privileges and rights in regard to education which it had at the date of Confederation, but the provincial legislatures were not debarred from legislating on the subject of separate schools provided they did not thereby prejudicially affect privileges enjoyed before Confederation by such schools in the province.

As to the legal and other controversies affecting these questions, the student may consult Hansard between 1890 and 1897. “Wheeler's Privy Council Cases,” pp. 370 to 388. Supreme Court Reports, Vol. 19, and other authorities of a like nature.

**Judicature.**—The appointment, salaries and pensions of judges are dealt with under sections 96 to 101. The judges, (except in the courts of probate in New Brunswick and Nova Scotia) are to be appointed by the Dominion Government from the Bars of their respective provinces, and to hold office during good behaviour, being

removable by the Governor-General only on address of the Senate and House of Commons. Their salaries are to be fixed and provided by Parliament.

Under the provisions of section 101, empowering Parliament to establish a general Court of Appeal, the Dominion Parliament passed in 1875 an Act to establish a Supreme Court and Court of Exchequer for the Dominion (38 Viet., Chap. II). In 1877, however, these courts were separated and the Exchequer Court of Canada, with one judge, a registrar, and other proper officers, was established. An additional judge was added to this court in 1912.

The Supreme Court of Canada has appellate jurisdiction from all the courts of the provinces, and questions may be referred to it by the Governor-General in Council. It has also jurisdiction in certain cases between the provinces, and in cases of controversies between provinces and the Dominion. While its judgment is final in criminal cases, there is in civil cases, subject to certain limitations, an appeal to the Judicial Committee of the Privy Council in England, which also entertains appeals direct from the provincial Courts of Appeal. The decisions of the Supreme Court and of the Judicial Committee of the Privy Council constitute the case-law of our constitution, the legal interpretation of the constitution and of the varied powers of the Dominion and provincial legislatures.

**Finance.**—Part VIII of the British North America Act deals with public finance. Generally, the revenues which had previously accrued to the treasuries of the provinces were now transferred to the Dominion, notably the custom duties. The public works, cash assets and other property of the provinces, except lands, mines, minerals and royalties, also became Dominion property. In its turn, the Dominion was to become responsible for the debts of the provinces. Since the main source of the revenues of the provinces, customs duties, was now taken over by the Dominion, the Dominion was to pay annual subsidies to the provinces for the support of their governments and legislatures. These subsidies have from time to time been increased.

**Miscellaneous.**—Among the miscellaneous provisions contained in Part IX of the British North America Act, are sections providing for the retention of existing legislation of the provinces in force until repealed, the transfer of existing officials to the Dominion, and the appointment of new officials. The Parliament of Canada was also given power necessary to perform treaty obligations of Canada, as a part of the British Empire, towards foreign countries.

Under section 133, either the English or the French language may be used by any person in the debates of the Houses of Parliament or of the Houses of the Legislature of Quebec, all Acts of which bodies are to be printed in both languages. Either language, too, may be used by any person in any court of Canada established under the Act, or in the Courts of Quebec.

**Veto Power.**—Under section 56, it is provided that Acts of the Dominion Parliament, after receiving the assent of the Governor-General, may within two years be disallowed by the Sovereign in



Council. Similarly Acts of the Provincial Legislature, after receiving the assent of the Lieutenant-Governor, may be disallowed within one year by the Governor-General in Council.

This veto power on Dominion legislation has practically never been exercised by the Sovereign in Council. In the case of controversies between the Dominion and the Provinces, while the veto power has been exercised in the past, the whole present tendency is to let the matter be decided by the courts rather than disallow by an executive act legislation duly passed by the elected representatives of the people in the provincial legislatures. The argument is that if such legislation is annulled as *ultra vires* of the Provincial legislature, then the Dominion Government, an executive body, has made itself the judge in its own case, which could be more properly decided by the courts; if legislation, admittedly *intra vires* of the provincial legislature, is annulled, on the ground of its immorality or unwisdom, then the annulling power has set itself up as an authority on morality and wisdom. The Dominion Minister of Justice, in 1909, on the question of disallowing the Ontario legislation with respect to the Hydro-Electric Power Commission, stated the case as follows:—

"In the opinion of the undersigned, a suggestion of the abuse of power, even so as to amount to practical confiscation of property, or that the exercise of a power has been unwise or indiscreet, should appeal to your Excellency's government with no more effect than it does to the ordinary tribunals, and the remedy in such case is an appeal to those by whom the legislature is elected."<sup>1</sup>

## CONSTITUTIONAL DEVELOPMENTS SINCE CONFEDERATION.<sup>2</sup>

Since no attempt was made in the British North America Act to define the relations between the British and the Canadian Governments, those relations have necessarily passed and are still passing through a stage of gradual development in which they are influenced to a remarkable extent by custom and convention and the creation of "new conventions of the Constitution." From the very commencement of our history as a nation there has been a gradual development of the powers of the Canadian Government, accompanied by a more liberal attitude on the part of British statesmen, which has been largely due to the more advanced ideas of government which have permeated the administration of the mother country itself. In 1876, for example, the then Colonial Secretary proposed to issue permanent instructions to the Governor-General providing that the latter should preside at meetings of the Council (a right which in the case of the Sovereign had long fallen into desuetude); that he might dissent from the opinion of the major part or of the whole; and that in the exercise of the pardoning power in capital cases, he was to receive

<sup>1</sup> This right has only been exercised in one rather technical case. In 1873 an Act of the Dominion Parliament empowered any committee of the Senate or House of Commons to examine witnesses upon oath when so authorized by resolution. "There was a confusion of opinion as to the competency of Parliament to enact it. The law officers of the United Kingdom eventually advised that the Act was *ultra vires*, and it was accordingly disallowed for that reason and not upon considerations of policy."—Borden, *Canadian Constitutional Studies*, p. 65.

<sup>2</sup> In this part of the article, considerable use has been made of Sir Robert Borden's recently published volume, "Canadian Constitutional Studies."



the advice of ministers, but to extend or withhold pardon or reprieve according to his own judgment (one of the last prerogatives to disappear in the case of the Sovereign). The then Canadian Minister of Justice, Hon. Edward Blake, secured in 1878 the issuance of a new set of instructions, in which the only provision that the Governor-General might act except on the advice of Ministers related to the exercise of the pardoning power, providing that in cases where a pardon or reprieve might affect Imperial interests, the Governor-General should take these interests into his personal consideration in conjunction with the advice of his Ministers.

The development of inter-Imperial relations up to the Great War may be studied in the records of the Colonial Conference. In the first Colonial Conference of 1887, we have a purely consultative gathering in calling which the chief aim of the British Government was probably to devise a method of more effective co-operation in defence. After a second, but constitutionally unimportant Conference had been held in Ottawa in 1894, the third Colonial Conference, attended only by Prime Ministers, was held in London in 1897, and the fourth, which Dominion Ministers attended to assist their Prime Ministers, in London in 1902. At the latter Conference a resolution was passed favouring the holding of such Conferences at intervals not exceeding four years at which "questions of common interest could be discussed and considered as between the *Colonial Secretary* and the Prime Ministers of the self-governing Colonies. In 1905 the Colonial Secretary, Mr. Lyttleton, suggested to the Dominion that the Colonial Conference should be changed into an Imperial Council, consisting of the Colonial Secretary and the Prime Ministers or their representatives. On Canada objecting to the use of the term "Council" the name was changed to "Imperial Conference." In 1907 the first "Imperial Conference" assembled; by an extraordinarily significant change, it was provided that future Conferences should be between the Government of the United Kingdom and the Governments of the self-governing Dominions, and that the *Prime Minister* of the United Kingdom (not the Colonial Secretary) was to be *ex officio* President of the Conference, while the Prime Ministers of the Dominions and the Colonial Secretary were to be *ex officio* members. This was a move toward recognizing that the Home Government was simply *primus inter pares* among the nations of the Empire. The Conference of 1911 met under this arrangement, and in 1912 the British Government gave Canada an assurance that a Dominion Minister resident in London would be regularly summoned to all meetings of the Committee of Imperial Defence and that no important step in foreign policy would be taken without consultation with such representatives. In 1917 there was evolved what was known as the Imperial War Cabinet, a gathering of the five members of the British War Cabinet and the Prime Ministers of the self-governing Dominions.

A resolution on the question of future constitutional relations passed unanimously at this Conference is of profound significance. It was as follows:—

"The Imperial War Conference are of opinion that the readjustment of the constitutional relations of the component parts of the Empire is too important and intricate a subject to be dealt with during the war, and that it should form the subject of a special Imperial Conference to be summoned as soon as possible after the cessation of hostilities.

"They deem it their duty, however, to place on record their view that any such readjustment, while thoroughly preserving all domestic affairs, should be based upon a full recognition of the Dominions as autonomous nations of an Imperial Commonwealth, and of India as an important portion of the same, should recognize the right of the Dominions and India to an adequate voice in foreign policy and in foreign relations, and should provide effective arrangements for continuous consultation in all important matters of common Imperial concern, and for such necessary concerted action, founded on consultation, as the several Governments may determine."

In regard to the first paragraph of the above, the 14th resolution of the Conference of 1921 stated that "having regard to the constitutional developments since 1917, no advantage is to be gained by holding a constitutional Conference." This sentence undoubtedly had reference to the consultation of the Dominions in regard to the terms of peace and their membership in the League of Nations. On Oct. 29, 1918, the question of representation of the Dominions in the peace negotiations was raised by the Prime Minister of Canada in a despatch to the Prime Minister of the United Kingdom. The Imperial War Cabinet eventually accepted the proposal, but when the question came before the Peace Conference at Paris on January 12, 1919, strong opposition was encountered. This opposition, however, was finally overcome. Through a combination of the panel system, by which the representatives of the British Empire might be selected from day to day as the nature of the subject demanded, with distinctive representation of each Dominion, the Dominions secured effective representation, and took no inconsiderable part in the Conference.

As a natural development of this representation came the signature by the Dominion plenipotentiaries of the various treaties concluded at the Conference, the submission of these treaties for the approval of the Dominion Parliaments, and the appearance of the Dominions as Signatory Powers. Further, the Dominions claimed that they should be accepted as members of the new League of Nations, and represented on its Council and Assembly. This claim was finally accepted, and the status of the Dominions as to membership and representation in the Assembly is precisely the same as that of other signatory members. As to representation on the Council, the Prime Minister of Canada obtained from President Wilson and Messrs. Clemenceau and Lloyd George, a signed declaration that "upon the true construction of the first and second paragraphs of that Article, representatives of the self-governing Dominions of the British Empire may be selected or named as members of the Council." At the first Assembly of the League of Nations at Geneva, from Nov. 15 to Dec. 18, 1920, Canada was represented by the Rt. Hon. Sir Geo. E. Foster, the Rt. Hon. Chas. Jos. Doherty and Hon. N. W. Rowell, the first of whom acted as a Vice-President of the Assembly.<sup>1</sup>

<sup>1</sup>An account of the proceedings of this first Parliament of the Nations was given on pages 738 to 742 of the 1920 edition of the Year Book.

The participation of Canada in the Peace Treaty and in the League of Nations made it necessary for an official definition of Canadian nationals and Canadian nationality to be made, since among different measures adopted in connection with the operations of the League of Nations, were provisions defining certain rights and privileges to be enjoyed by the nationals of members of the League. A Canadian national was accordingly defined by 11-12 George V, chap. 4, as:

- (a) any British subject who is a Canadian citizen<sup>1</sup> within the meaning of The Immigration Act, chapter 27 of the Statutes of 1910, as heretofore amended;
- (b) the wife of any such person;
- (c) any person born out of Canada, whose father was a Canadian national at the time of that person's birth, or with regard to persons born before the passing of this Act, any person whose father at the time of such birth, possessed all the qualifications of a Canadian national as defined in this Act.

In the debates on this Act it was thoroughly established that its effect was not in any way to supersede the term "British subject," but to create a sub-class of "Canadian nationals" within "British subjects."

A similar advance toward recognition of the existence of a Canadian nation is to be found in the gradual tendency toward direct negotiation instead of negotiation through London with the diplomatic or consular representatives of other powers. For many years the consuls-general of other countries at Ottawa or Montreal, more especially the consuls-general of the United States, Japan, Italy and Germany, discharged diplomatic or semi-diplomatic functions in Canada, and Sir Wilfred Laurier in 1910 considered that while "this has been done without authority and is contrary to the rules that apply among civilized nations, it became a necessity because of the development of the larger colonies of the British Empire, which have become practically nations." Further. Mr. Blake in 1882, Sir Richard Cartwright in 1889, and Mr. Mills in 1892 moved resolutions in favour of Canadian diplomatic representation at Washington, emphasizing the fact that a Canadian diplomatic representative would be an envoy of the Queen, that he would act in co-operation with the British Ambassador at Washington, that he would be in direct communication with the Government of Canada, to whom he would be responsible, and that the growing importance of Canada's relations with the United States made such an appointment desirable. While at that time these proposals were regarded as premature, in 1918, when Canada and the United States were both devoting their energies to the great struggle against a common foe, it was found necessary to establish a Canadian War Mission at Washington,

<sup>1</sup>According to the Immigration Act, 1910, a "Canadian citizen" is

(i) a person born in Canada who has not become an alien;

(ii) a British subject who has Canadian domicile;

(iii) a person naturalized under the laws of Canada who has not subsequently become an alien or lost Canadian domicile."



which in effect, though not in form, was a diplomatic mission. This brought to a head the question of Canadian diplomatic representation at Washington; the authorities in London were consulted, with the result that on May 10, 1920, it was announced to Parliament that "it has been agreed that his Majesty on advice of his Canadian ministers, shall appoint a Minister Plenipotentiary who will have charge of Canadian affairs and will at all times be the ordinary channel of communication with the United States Government in matters of purely Canadian concern, acting upon instructions from, and reporting direct to the Canadian Government. In the absence of the Ambassador the Canadian Minister will take charge of the whole embassy and of the representation of Imperial as well as Canadian interests. He will be accredited by his Majesty to the President with the necessary powers for the purpose. This new arrangement will not denote any departure either on the part of the British Government or of the Canadian Government from the principle of the diplomatic unity of the British Empire." The principle involved in this arrangement had, as a matter of fact, already been accepted in the appointment of the International Joint Commission. Up to May, 1922, however, no Canadian Minister to Washington had been appointed.

**Negotiation of Treaties.**—The right to negotiate commercial and other treaties has been developing almost from the beginning. In 1871, the Prime Minister of Canada, Sir John A. Macdonald, became one of the British commissioners acting under instructions from the British Government, at the conference that resulted in the Treaty of Washington. This dual function, however, he found a very difficult one. In 1874, Hon. Geo. Brown was associated with the British Minister at Washington for the purpose of negotiating a commercial treaty between Canada and the United States. In 1878, the High Commissioner, Sir A. T. Galt, was commissioned to undertake negotiations with France and Spain for better commercial relations, these negotiations, however, to be conducted by the British Ambassador. In 1884, the High Commissioner for Canada, Sir Charles Tupper, in conjunction with the British Ambassador to Spain, was given full powers to conduct negotiations for a commercial treaty between Canada and Spain, the negotiations to be conducted by Sir Charles Tupper, the convention to be signed by both plenipotentiaries. In 1891, the Canadian Parliament petitioned for the denunciation of the commercial treaties with the German Zollverein and Belgium, which prevented Canada from extending preferential treatment to British products. The new Canadian tariff of 1897 provided for the grant of preferential treatment to British goods, and at the Colonial Conference of that year, the Premiers of the self-governing colonies unanimously recommended "the denunciation at the earliest convenient time of any treaties which now hamper the commercial relations between Great Britain and her colonies." The treaties were accordingly denounced. In 1907, Mr. Fielding and Mr. Brodeur negotiated a commercial convention between Canada and France, and in 1911, the negotiations regarding reciprocity



with the United States were carried on directly between the Government of Canada and the Government of the United States. In 1914, the Arbitration Treaty concluded between the British Empire and the United States, made provision that in case the British interests affected were mainly those of some one or other of the self-governing Dominions, the minister of the International Commission of Arbitration chosen from the British Empire might be selected from the Dominion principally interested. In December, 1918, commissioners were appointed by Canada and the United States to make a joint inquiry into fisheries questions arising between the two countries. As a result, a treaty looking to the preservation of the Pacific coast fisheries was signed by the Commissioners, but failed to secure ratification by the United States Senate.

**Defence.**—As early as 1862 the Government of Canada, following British precedents, successfully asserted the principle that the raising and maintenance of Canadian military forces were subject to the absolute control of the representatives of the Canadian people. During the South African war, the last of the British garrisons was temporarily, and in 1905, permanently withdrawn and the defence of the naval stations at Halifax and Esquimalt was taken over by the Canadian Permanent Force. When on the outbreak of war in 1914, Canadian forces were sent overseas an important constitutional question was the sufficiency of Canadian legislation for the control and discipline of the forces when outside the Dominion. However, the Governor in Council is authorized by section 69 of the Militia Act to place the militia on active service beyond Canada for the defence thereof, and by section 4 of the same Act, the Army Act, the King's Regulations and other relevant laws not inconsistent with Canadian enactments have force and effect for the governance of the militia as if enacted by the Parliament of Canada. But the Army Act, in section 177, provides that where a force of militia is raised in a colony, any law of the colony may extend to those belonging to that force, whether within or without the boundaries of the colony. This settled the question of extra-territorial jurisdiction. Another important development was the establishment in London in October, 1916, of a Canadian Ministry of Overseas Military Forces with a resident Minister. In course of time this became an Overseas Canadian War Office, with an adequate staff and a systematic arrangement of branches, administering the Canadian forces as a thoroughly autonomous body, under the primary direction of the Overseas Ministry, but finally responsible to the Canadian Government and Parliament.

**Immigration.**—Though provinces may legislate in the matter of immigration, their legislation falls to the ground if it is inconsistent with the legislation or with the international obligations of the Dominion. Several Acts of the province of British Columbia restricting immigration have been disallowed on this account. Under the Dominion law, Chinese immigrants are subjected to a head tax of \$500, while Japanese immigrants are handled under a "gentlemen's

agreement" with the Imperial Japanese Government, Japan undertaking to restrict the flow of Japanese to Canada. The restriction of immigration from other parts of the Empire, and more particularly from India, is, however, a very difficult question because of its reaction on the loyalty of the Indian peoples to the Empire. The question was discussed at the Colonial Conference of 1897 and at the Imperial Conference of 1911, when it was pointed out that the reasons for existing restrictions were purely economic and did not involve the question of the inferiority of those restricted. In 1917, the matter was discussed at the Imperial War Conference. The principle of reciprocity of treatment was accepted, and at the 1918 Conference it was agreed that "It is an inherent function of the Governments of the several communities of the British Commonwealth, including India, that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities." Provision was, however, made for permitting temporary visits. This arrangement has, at least for the time, settled a dispute which endangered the stability of the Empire.

**Naturalization.**—For a long period a very vexed question was the right of naturalization. Up to 1914, the Dominions were unable to grant full naturalization which would hold good throughout the Empire. In that year an act of the British Parliament (4-5 Geo. V, c. 17), provided for the issue of a naturalization certificate to an alien by the Secretary of State on proof of five years' residence, and the fulfilment of certain other conditions. Where the Parliaments of the Dominions enforced the same conditions of residence, their Governments were given power to issue certificates of naturalization, taking effect in all parts of the Empire that had adopted the Act. This was done by Canada in 1914 (4-5 Geo. V, c. 44).

**Copyright.**—A difficult and anomalous situation with regard to copyright was similarly cleared up in 1911, the Imperial Copyright Act of that year being based on the principle that in respect of copyright, the Dominions must be free to legislate as they saw fit. The Act of 1911, therefore, does not extend to any Dominion except where the Parliaments of these Dominions have declared it to be in force; similarly, Dominion Parliaments may repeal it where it is in force. With regard to merchant shipping, the situation discussed at the Imperial Conference of 1911 has not as yet been cleared up.

**Granting of Titles.**—Another source of difficulty between the British Government and the Dominions has been the granting of titles by the former to citizens of the latter who have rendered services to the Empire as a whole. Opportunities of rendering such service came to many citizens of the Dominions during the war, and the British Government was generous in its recognition of these services. Exception was taken in the Canadian Parliament to the granting of titles to Canadians, and in 1919 Parliament passed an address to his Majesty praying that he should "refrain from conferring any title of honour or titular distinction upon any of his

subjects domiciled or ordinarily resident in Canada, save such appellations as are of a professional or vocational character or which appertain to an office." It is interesting to note that, in the case of the proposed grant of a peerage by the British Government to a distinguished citizen of the Union of South Africa for war services, the Lord Chancellor of England has stated that it is "realized that no British citizen or subject primarily belonging to a Dominion ought ever to be recommended for honour in Great Britain, except with the assent and approval of his Government."

**General Conclusion.**—While it can hardly be maintained that the Dominions have as yet secured an adequate voice and influence in the direction of the Empire's foreign policy, it is to be observed that the powers of the Dominions have hitherto developed as the need for more extended powers has arisen. Without any violent break with the past, the Dominions have secured through the League of Nations a voice in international affairs as least as powerful as that of such independent nations as Argentina and Brazil. Ten years ago this would have been considered unthinkable without a total separation from the Empire, yet it has actually occurred, and there does not seem to be any reason why the process of evolution should not continue until we have the continuance of the British Empire secured upon a "basis of absolute out-and-out equal partnership between the United Kingdom and the Dominions."

The progress of the Dominions in international status in the past decade is thus set forth by Oppenheim, in the third edition of his *International Law*, Vol. 1, secs. 94a and 94b:

"94a. Formerly the position of self-governing Dominions, such as Canada, Newfoundland, Australia, New Zealand, and South Africa, did not, in International Law, present any difficulties. Then they had no International position whatever, because they were, from the point of view of International Law, mere colonial portions of the Mother Country. It did not matter that some of them, as, for example, Canada, and Australia, flew as their own flag the modified flag of the Mother Country, or that they had their own coinage, their own postage stamps, and the like. Nor did they become subjects of International Law (although the position was somewhat anomalous) when they were admitted, side by side with the Mother Country, as parties to the administrative unions, such as the Universal Postal Union. Even when they were empowered by the Mother Country to enter into certain treaty arrangements of minor importance with foreign States, they still did not thereby become subjects of International Law, but simply exercised for the matters in question the treaty-making power of the Mother Country which had been to that extent delegated to them."

"94b. But the position of self-governing Dominions underwent a fundamental change at the end of the World War. Canada, Australia, New Zealand, South Africa, and also India, were not only separately represented within the British Empire delegation at the Peace Conference, but also became, side by side with Great Britain, original members of the League of Nations. Separately represented in the Assembly of the League, they may, of course, vote there independently of Great Britain. Now the League of Nations is not a mere administrative union like the Universal Postal Union, but the organized Family of Nations. Without doubt, therefore, the admission of these four self-governing Dominions and of India to membership gives them a position in International Law. But the place of the self-governing Dominions within the Family of Nations at present defies exact definition, since they enjoy a special position



corresponding to their special status within the British Empire as "free communities, independent as regards all their own affairs, and partners in those which concern the Empire at large." Moreover, just as, in attaining to that position, they have silently worked changes, far-reaching but incapable of precise definition, in the Constitution of the Empire, so that the written law inaccurately represents the actual situation, in a similar way they have taken a place within the Family of Nations, which is none the less real for being hard to reconcile with precedent. Furthermore, they will certainly consolidate the positions which they have won, both within the Empire and within the Family of Nations. An advance in one sphere will entail an advance in the other. For instance, they may well acquire a limited right of legation or limited treaty-making power. But from this time onward the relationship between Great Britain and the self-governing Dominions of the British Empire is not likely to correspond exactly to any relationship hitherto recognized in International Law unless the British Empire should turn into a Federal State."

### THE ARMS OF CANADA.

(See *Frontispiece*).

Armorial bearings owe their existence to the need of providing men with some mark of identification. They originated in the Middle Ages, when few men could read, but when all were trained to distinguish such symbols at a glance. Under these circumstances, the arms of the sovereign became generally identified with the arms of the nation, were emblazoned on shields and were later often incorporated into the national flag. In the case of England, the royal standard bears the Coat of Arms of the Sovereign, while the Union Jack or national flag is composed of the combination of the red cross of St. George on a white field, borne as their banner by the English from the time of the second Crusade, the white cross of St. Andrew on a blue field (Scotland), added in 1707, and the white cross of St. Patrick on a red field (Ireland), added in 1801.

Until 1921, the question of the Arms of Canada remained in an unsatisfactory position. In this country the Royal Arms, in their English form, have always been freely used. Soon after Confederation, when a Great Seal was required, a design approved by Royal Warrant of 26 May, 1868, displayed the arms of the four confederated provinces—Ontario, Quebec, Nova Scotia, and New Brunswick. This design, though not used for the Great Seal, was gradually adopted as the Arms of Canada. As the number of provinces increased, it became a common practice to add their arms to the original design. This resulted in overloading the shield with a multiplicity of detail. and a Committee, appointed to submit proposals, recommended the adoption of a coat of arms which has been approved by the Government and duly authorized, on November 21, 1921, by the King.

Three considerations were kept in view in determining the "achievement of arms," i.e., the combination of arms, crest, supporters, and motto, which has now been authorized. These were: first, that Canadians stand to their King in as close a relation as do any of his subjects elsewhere; secondly, that Canada, an integral part of the British Empire, has emerged from the war a member of the League of Nations; and lastly, that Canada was founded by the men of four different races—French, English, Scottish and Irish—and that Canadians inherit the language, laws, literature and arms of all four mother countries.



The arms are those of England, Scotland, Ireland and France, with a "difference" to mark them as Canadian, namely, on the lower third of the shield, a sprig of maple on a silver shield.

The crest is a lion holding in its paw a red maple leaf, a symbol of sacrifice.

The supporters are, with some slight distinctions, the lion and unicorn of the Royal Arms. The lion upholds the Union Jack, and the unicorn the ancient banner of France.

The motto is new—"A mari usque ad mare"—"From sea to sea", or, in a phrase familiar in Canadian politics and Canadian literature, "ocean to ocean". It is an extract from the Latin version of verse 8 of the 72nd Psalm, which in the Authorized Version is: "He shall have dominion also from sea to sea, and from the river unto the ends of the earth." The Latin reads: "*Et dominabitur a mari usque ad mare, et a flumine usque ad terminos orbis terrarum.*" There is a tradition that the Fathers of Confederation derived the designation "Dominion" from this verse.

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## II.—PROVINCIAL AND LOCAL GOVERNMENT IN CANADA.

### MARITIME PROVINCES.

By the late THOMAS BARNARD FLINT, M.A., LL.B., D.C.L., Clerk of the House of Commons of Canada, Ottawa.

The constitution and legislative powers of the provinces of the Dominion are in their general outlines as settled and regulated by the British North America Act, 1867, and amending acts. But in the development of local administration and in the working out of local problems, the provinces have varied considerably. These variations have depended primarily upon the stages and forms of local self-government in force at the time of Confederation, and secondarily upon the financial and industrial policies of the legislatures which then assumed control. Nova Scotia and New Brunswick were two of the original provinces which formed the federal union of Canada. Prince Edward Island became part of the federal system in 1873.

Nova Scotia, New Brunswick and Prince Edward Island, immediately after entering the union, found themselves each equipped with a Lieutenant-Governor appointed by the Governor-General. This official holds office, generally speaking, for five years from the date of his appointment. He is not removable except for cause assigned and communicated to Parliament. The provisions relating to the powers, duties and responsibilities of Lieutenant-Governors are to be found in sections 58 to 68, inclusive, of the British North America Act, 1867, and apply uniformly to all Lieutenant-Governors throughout the Dominion.

The legislatures of each of the three Maritime Provinces, upon entering the union, consisted of the Lieutenant-Governor and of two Houses, styled the Legislative Council and the Legislative Assembly. These legislatures had the same exclusive powers assigned to them as to the other provinces entering the union at the same or at any subsequent period. One of the most important of these powers is that of the amendment, from time to time, of the Constitution of the province, except as regards the office of the Lieutenant-Governor. Like all the other provinces, they have the power of direct taxation within the province, of borrowing money, of establishing public offices, of disposing of the crown lands of the province, of the maintenance and establishment of a great variety of public and reformatory institutions and of municipalities with such powers as the province may see fit to grant. The list of exclusive provincial powers also includes such important matters as the making of laws relating to licenses for raising revenue for provincial or municipal purposes; providing for local works and undertakings of every description (except certain classes specially reserved to the federal power); incorporating companies with provincial objects; and legislation respecting the solemnization of marriage. The whole vast field of property and civil rights within the province, the administration of justice and the constitution, maintenance and organization of provincial courts with both civil and criminal jurisdiction, as well as the procedure in civil matters in those courts, are retained under provincial jurisdiction.

The exclusive control of each province over the subject of education has given rise to legal and constitutional questions of the highest importance. Their adjustment has engaged the attention of legislatures, of parliament and of the courts of Canada, as well as the privy council of the Mother Country from time to time almost since the day of the union.

The provinces have also legislated upon, and devoted large sums of money to the promotion of agriculture, and to some extent immigration in which they have been assisted by the federal administration, which also has jurisdiction over these subjects. These powers are of course common to all the provinces.

#### NOVA SCOTIA.

This province has made no organic changes in its constitution since the union in 1867. In 1867, the Legislative Council consisted of 36 members and the Legislative Assembly of 55 members. The number of members of the Legislative Council is now 21 and of the Assembly 43. Legislative councillors are appointed for life, and the members of the Assembly are elected for four years, the Assembly term consisting of that period. The constitutional relations of the ministry to the Assembly are based on the well recognized principles of responsible government, in accordance with which the ministry retains office only so long as it is supported by a majority in the Legislative Assembly. This rule applies to all the provinces of Canada. Many efforts made towards abolishing the Legislative

Council in Nova Scotia have proved abortive. The local ministry or cabinet, styled the Executive Council, consists of the Prime Minister, (being the Provincial Secretary and President of the Council), the Attorney-General, the Minister of Works and Mines and the Minister of Highways. These are salaried officials, and the other members are six in number without office. Agriculture, immigration and education are under the control and management of the government through certain boards and councils, each with its secretary and staff of officials.

The sources of the principal revenues are (1) mines and minerals upon which certain royalties are charged, together with license fees and rentals; (2) the federal subsidy and interest on balances due from the Dominion, paid by virtue of the British North America Act; (3) interest on railway loans and advances, succession duties, payments from the Dominion Government under the Agricultural Instruction Act; (4) crown lands and other fees and dues paid into the Provincial Secretary's office. In 1921, the total revenue from all sources, capital and ordinary, was \$10,427,919.32.

**Municipal Institutions.**—Municipal administration in Nova Scotia has been developed since Confederation. Previous to that event the local government of counties and townships was confided to the magistracy, which was an appointed body, holding commissions for life and not responsible in any way to the electorate. In the early years of its history this body did much useful and important public service, yet abuses here and there existed on account of the irresponsible nature of their tenure of office, which rendered reform and public accountability very difficult to obtain. Public opinion, however, and the controlling influence of the legislatures operating steadily upon even irresponsible bodies of life-appointed magistrates made the institution as it existed fairly acceptable to the people generally. In 1864 an act providing for the optional incorporation of counties and townships was passed, but few counties or districts took advantage of the privilege thus accorded. In 1875, the incorporation of the counties and certain townships was made compulsory, twenty-four municipalities being then established. In 1895, the Towns Incorporation Act was passed, making the incorporation of towns throughout the province optional. In 1921 there were 41 incorporated towns.

The county councils consist of councillors elected by the rate-payers every three years; usually one is elected for each polling district, but in some districts two are provided for. The warden or presiding officer is chosen by the council and holds office until the next election of councillors. The mayors of towns are elected by the rate-payers and hold office for one year. The city of Halifax, the capital of the province, has a special charter, the mayor being elected annually and the eighteen aldermen (or members) for three years, six retiring each year but being eligible for re-election.

The exercise of the powers of the councils, the election of their members and the duties and responsibilities of their officials, their

meetings, proceedings and by-laws, their methods and forms of taxation, as well as the limitation of their borrowing powers, are controlled and regulated in each particular by statutes rigidly enforced by provincial authority or by the courts. The training of large numbers of public spirited citizens in the practical exercise of the duties of self-government is not the least of the advantages of the municipal systems of Canada. They furnish a rich fund of talent and experience upon which to draw for the wider spheres of provincial and federal legislation.

**Judiciary.**—The provincial courts consist of (1) the supreme court, which is a court of appeal and also a circuit court, and (2) the county courts. The supreme court consists of a chief justice and six other judges. One of these is a judge in equity, who also acts in divorce causes and one is admiralty judge of the exchequer court of Canada. This court has original jurisdiction in all matters not specially delegated to the lower courts and appeal jurisdiction from the county courts. The county courts have a limited original jurisdiction and an appeal jurisdiction from probate and magistrates' courts in certain cases. The judges of this court are seven in number, each having a district of jurisdiction covering a county or group of counties and holding terms of court in the county towns of their respective districts.

The judges of the supreme and county courts are appointed and paid by the Dominion Government, but the procedure of the courts in all civil matters is regulated by provincial legislation. The purely provincial courts and courts of probate have jurisdiction over wills and intestate estates. Stipendiary and police magistrates' courts and courts of justices of the peace are also under provincial jurisdiction. The judges of these courts and justices of the peace are appointed by the local government and are paid, in some cases by salaries and in others by fees. The sheriffs, clerks, registrars and officers of all the courts are appointed by the provincial authorities.

In criminal cases the jurisdiction and procedure of all the courts are fixed by federal statutes. The procedure as to the selection of grand and petit jurors, of revisers of voters' lists and assessment courts is fixed by the provincial statutes. In each county, and in some counties in one or more districts of a county, are offices for the registry of deeds and of all documents pertaining to transfers of or affecting titles to real estate as well as those creating and discharging liens on personal property.

#### NEW BRUNSWICK.

The province of New Brunswick in all essential features of provincial administration is similar to its neighbour, Nova Scotia, but some differences may be noted. The province entered Confederation with a Legislative Council of 40 members holding their seats for life, a Legislative Assembly of 40 members and an Executive Council of nine members. Under its powers of changing the provincial constitution the Legislative Council was abolished by an act passed on April 16, 1891. For many years an agitation for its abolition had continued,



and the governments of the period refrained from filling vacancies until the number of members was so reduced that the passage of an abolition act became comparatively an easy matter. The retiring members of the Council retained their title and precedence for life. The Assembly at present is composed of 47 members, and the Executive Council is composed of (1) the Premier, (2) the Minister of Lands and Mines, (3) the Minister of Public Works, (4) the Provincial Secretary-Treasurer, (5) the Minister of Agriculture, (6) the Minister of Public Health, and (7) the Attorney-General. Each of these ministers has a departmental staff under his direction.

The ordinary revenue for the fiscal year ended Oct. 31, 1921, amounted to \$2,892,905 and the ordinary expenditure to \$3,432,512.

In New Brunswick the subject of public instruction is under the management of a Board of Education consisting of the Lieutenant-Governor of the Province, the members of the Executive Council, the Chancellor of the University of New Brunswick and the Chief Superintendent of Education.

**Municipal Institutions.**—On the subject of municipal institutions, under which the people have more complete control over their local affairs, the province of New Brunswick has passed through stages of development similar to those of Nova Scotia. An interesting passage will be found in Hannay's History of New Brunswick, where, writing on this subject, he observes:

"Sir William Colebrooke and Sir Edmund Head had both regretted the failure of attempts to establish municipal institutions throughout the province, but they perhaps did not discern that this failure was due to the influence of the magistrates in sessions, who did not like to be deprived of their power of controlling the affairs of the counties. These magistrates naturally resisted every improvement, which they denounced as innovations, and they were supported generally by the Legislative Council.

"The system of county government was as bad as possible, because the magistrates were not responsible to any person. The condition of the county accounts was never made public, and it was not until a comparatively late period in the history of the province that the Grand Jury obtained legislative authority to inspect the county accounts.

"Municipal institutions came in the course of years, but not till long after Sir Edmund Head had taken his departure from the province. Since then the influence of the people upon the municipal government has been strengthened by the incorporation of most of the towns in the province, so that the people have an opportunity not only of knowing how their money is being spent but of directing the expenditure."

In New Brunswick the first municipal act was passed in 1851. This act, which was subsequently amended, rendered incorporation optional. But these acts were not in many cases taken advantage of. The counties were, however, divided into parishes, districts having a certain amount of local autonomy and some limited powers of administration, which have been recognized in subsequent municipal legislation. They are provided with local courts presided over by commissioners who are *ex officio* justices of the peace, and in some cases they are provided with stipendiary or police magistrates. These commissioners have civil jurisdiction in debts not exceeding eighty dollars and in cases of tort when the damages claimed do not exceed thirty-two dollars.

At the time of confederation the municipal system had been very slightly developed. But in 1877 an act providing for compulsory municipal incorporation was put in force, and, with its amendments, is substantially in force at the present time. It provides that county councils be constituted as bodies corporate, having two councillors elected yearly from each parish in the county. The councils elect from among their members a presiding officer who is styled the warden and who holds office until the next election of councillors. Councils may themselves, however, provide by by-law for their election biennially, a provision which does not apply to the municipality of the city and county of St. John. The city of St. John, which in 1785 was known as "Parr Town," received a charter in that year through Lieutenant-Governor Carleton, a brother of the famous soldier, Sir Guy Carleton (afterwards Lord Dorchester). The qualifications of voters for the councils are very liberal. Every male, or female person, being a widow or unmarried, of the age of 21 years or over, being a British subject, a ratepayer of the parish having an income or personal property or both combined to the amount of one hundred dollars, is entitled to vote. A resident of the parish having real property of any value, or, if not a resident, having real property to the value of one hundred dollars, is also entitled to vote. The dates and time of meeting of the councils are fixed by statute and differ in different municipalities. In addition to a warden each elects a secretary, a treasurer (the two offices may be combined in one person), and an auditor, who may not be a councillor nor hold any office under the council. The councils also appoint overseers of the poor, constables, commissioners of highways, collectors of rates and other parish and county officials as may be necessary. Councillors under some circumstances also act as revisers of voters' lists. The warden is required to publish each year a full and detailed financial statement of the affairs of the municipality which shall be signed by the auditor and himself.

#### PRINCE EDWARD ISLAND.

At the time of entering the union the government of Prince Edward Island consisted of a Governor and an Executive Council, a Legislative Council of 13 members, and a House of Assembly of 30 members. The Legislative Council was made elective in 1862 and so continued until its abolition after the union in 1873. The former Legislative Council districts, after the passage of the Abolition Act, elected members to the Legislative Assembly, fifteen in number, while the same districts elected members to the Assembly on a different franchise, thus practically amalgamating the two Houses into one Assembly of 30 members. The electoral system, as far as voting is concerned, is practically one of manhood suffrage. The Executive Council of Prince Edward Island consists of (1) the President of the Council, (2) the Provincial Secretary-Treasurer, who is also Commissioner of Agriculture, (3) the Commissioner of Public Works, (4) the Attorney-General and (5) four members without portfolio.

With regard to the judiciary, the supreme court has a chief justice and two assistant judges. The chief justice is also the local judge in admiralty of the exchequer court. The supreme court is also a court of appeal and has jurisdiction in appeal chancery cases. It has original jurisdiction both in civil and criminal matters. In civil cases of debt the action must be for an amount above \$32, and all cases beyond the jurisdiction of the county court may be tried before a judge of the supreme court. The assistant judges of this court have also chancery powers. There is a surrogate and probate court for the province with one judge. A system of county courts is established consisting of three judges, one for each county. These are appointed and paid by the federal government and have jurisdiction in suits up to the sum of one hundred and fifty dollars. Education is under the direction of a Board of Education consisting of the members of the Executive Council of the province and the Superintendent of Education, who is also secretary of the Board.

In the calendar year 1921, the ordinary revenue amounted to \$727,046 and the ordinary expenditure to \$687,935.

### QUEBEC.

By G. E. MARQUIS, Chief, Bureau of Statistics of Quebec.

**Political and Administrative Organization.**—The visitor who for the first time enters the chamber of the Legislative Assembly of Quebec is sure to notice and admire the large painting placed above the Speaker's chair. This painting represents the first assembly of representatives of the people to be elected by popular vote, which sat in Canada at Quebec, the capital of Lower Canada, in 1792, on the establishment of the parliamentary government which still exists and which originated in the Constitutional Act of 1791.

A similar form of government was at the same time established in the province of Upper Canada. This state of affairs lasted down to 1840, when the two provinces were united, and the territory governed by the union of the two Canadas received the name of province of Canada. Finally in 1867 a confederation of four provinces was set up. The provinces of Ontario, Quebec, New Brunswick and Nova Scotia were the first to join in establishing a central government, the seat of which was fixed by the Imperial Government at Ottawa. To each province was granted a Provincial Government, having the right to legislate upon public instruction, public works (within the province), the administration of the lands, colonization, agriculture, asylums, prisons, reformatories and industrial schools, the organization of the civil courts, municipal institutions, as well as other points of Provincial interest. The respective powers of the Dominion and of the various Provincial Governments are exhaustively defined by sections 91 and 92 of the British North America Act.

The legislature of Quebec is composed of three branches: the Legislative Assembly of eighty-one members representing the eighty-two electoral divisions of the province (the counties of Chicoutimi



and Saguenay have the same representative); the Legislative Council of twenty-four members nominated for life by the Lieutenant-Governor in Council; and finally an Executive Council composed of the Lieutenant-Governor and his advisors, the ministers of the Crown.

The Legislative Assembly and also the Legislative Council have the power to bring forward bills relating to civil and administrative matters and to amend or repeal the laws which already exist. A bill, to be approved by the Lieutenant-Governor, must have received the assent of both Houses. Only the Legislative Assembly can bring forward a bill requiring the expenditure of public money. The extreme length of a Parliament is five years. Since Confederation sixteen premiers have been at the head of the administration of the Province of Quebec. At the present time the Premier is the Honourable L. A. Taschereau, who has been President of the Executive Council and Attorney-General since July, 1920. He is assisted by seven ministers, each with departmental portfolios (one of them, the treasurer, having two portfolios) and by four ministers without portfolio. Sir Charles Fitzpatrick, K.C., G.C.M.G., is the Lieutenant-Governor.

**Municipal Organization.**—For the purposes of local or municipal administration the Province of Quebec is divided into county municipalities, 74 in number; these include rural municipalities and villages, as well as town municipalities hitherto organized under the former municipal code. At the present time there are 20 city, 87 town and 249 village municipalities, as well as 926 rural municipalities, making a total of 1,282 local municipalities. Each local municipality is administered by a corporation composed of seven members in the rural municipalities and of a number varying according to the municipality in the cities and towns. In rural municipalities the election of candidates for the municipal council takes place annually in the month of January when three of the six councillors are replaced, while the mayor is elected for a two year term by the electors. The county council is composed of all the mayors of the villages and rural municipalities constituting the county. The head of this body bears the name of warden and is elected annually at the March quarterly meeting of the council.

Most of the towns and cities are organized into separate corporations independent of any county council, in virtue of special charters granted by the legislature. The composition varies in different municipalities. The functions of the municipal councils are very extensive. They can make regulations concerning municipalities, provided that these regulations contain no provisions incompatible with the laws of the country. They can appoint officials to manage the business of the municipality; form committees to undertake particular branches of the administration; make all highway regulations; nominate a local board of health; see to the maintenance of order; and finally aid colonization and agriculture by imposing direct taxes upon the taxable property of municipalities.

The powers conferred upon the municipal council are then very extensive, but these powers contained in the law of cities and towns



or in the municipal code extend only to questions of purely local interest. In order to distribute the taxation necessary to the local public administration every municipal council has the right to impose and raise by direct taxation on the taxable property of the municipality, as well as on certain business stock, any sum necessary and this within the limits of its functions. Every two years assessors are named by the Council who establish the value of the real property of their municipality. These assessors must make a new assessment roll every three years, but must amend and correct this roll every year. It is by basing itself on this assessment, that the municipal council raises the taxes which it needs to meet the expenses of administration. A few years ago a Department of Municipal Affairs was established in the Provincial Government to supervise more closely the carrying out of the municipal law. At the present time the Minister of Municipal Affairs is also the Treasurer of the Province, but he has a separate Deputy Minister for each of the two departments. It may be added that each year in the month of January the secretary or the warden of each municipal corporation, rural or urban, is under obligation to send to the Bureau of Statistics a report on the financial position of the corporation, as well as a summary of the operations undertaken in the various services in the course of the preceding year.

**School Organization.**—Public instruction in the Province of Quebec is governed by a single act called the Law of Public Instruction, although there are two kinds of schools, one for the Catholics and the other for the Protestants or non-Catholics. This is what is called the confessional system. Regulations for each of these religious units are prepared by the Catholic Committee or the Protestant Committee of the Council of Public Instruction, respectively, and submitted for the approval of the Lieutenant-Governor in Council before going into force. The territorial unit administered by a school corporation is called a school municipality. This may differ in boundaries from the parish and even from the local municipality. There are 1,718 of these school municipalities, of which 1,367 are Catholic and 351 Protestant. School municipalities are constituted at the request of a group of ratepayers by the Lieutenant-Governor in Council on the recommendation of the Superintendent of Public Instruction or occasionally by an act of the legislature. Each of them must be divided into school districts, except in the cities and towns. The administrative body which directs them bears the name of school corporation. The corporation is composed of five commissioners or three trustees. In the same municipality the dissentients, that is to say those who are from the religious point of view in the minority, elect the trustees.

The school commissioners and trustees are elected for three years, five of the former or three of the latter forming a school corporation. Their duties are numerous, but in brief it may be said that they must erect a school in each school district, look after its maintenance, provide the necessary equipment, engage teachers, supervise their teaching and settle the differences which may arise between teachers and parents.

Like the municipal corporations, the school corporations have the right to impose taxes for the construction and maintenance of schools and for the payment of the teaching staff. School taxation is distributed over all the taxable property of the school municipality; the assessment roll prepared by the Municipal Council must, except in rare cases, serve as a basis for the taxation imposed by the school corporations.

The school corporations have under their control schools of four kinds; kindergartens, elementary primary, intermediate primary and superior primary schools. Soon, however, a modification of the above classification will become effective, under which the last three types of schools will be reduced to two. The programme of studies has been modified so as to give a more suitable type of education to country children, so as to keep them on the land, and to provide for town and city children an education which will fit them for industry, commerce and finance.

Besides the schools under control of the school corporation, there are also the classical colleges where secondary instruction is given, as well as four universities, not including several special schools. The whole school organization is directed by the Council of Public Instruction, which prepares, as we have already seen, the school regulations and the programme of studies. It chooses also the professors and principals of the Normal schools, as well as the examiners of candidates for teachers' certificates; finally, it approves as it sees fit, the textbooks which are submitted to it. This Council is formed of two committees, Catholic and Protestant, each of which watches over the interests of its co-religionists in conformity with the law.

When the two Committees sit together, thus constituting the Council, its chairman is the Superintendent of Public Instruction, who also directs the Department of Public Instruction. He is named for life by the Lieutenant-Governor in Council, but the Provincial Secretary is the spokesman of this Department, and is responsible before the Provincial Legislature for its administration.

### ONTARIO.

By S. A. CUDMORE, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R. Econ. Soc., Editor  
Canada Year Book.

**Historical.**—The northern part of what is now the Province of Ontario came under British rule in 1713, by the Treaty of Utrecht, the southern part in 1763, by the Treaty of Paris. At the latter date the whole white population was only about 1,000, mainly settled along the Detroit River. By Royal Proclamation of Oct. 7, 1763, the eastern part of the province, and by the Quebec Act of 1774 (14 Geo. III, chap. 83), the whole of what is now southern Ontario, became part of the Province of Quebec, under French civil and English criminal law and without any representative government. The immigration of the United Empire Loyalists and their settlement in the country led to an increasing demand both for English civil law and for representative institutions. This demand was met by the

passing of the Constitutional Act of 1791 (31 Geo. III, chap. 31), which established the Province of Upper Canada (Ontario) with a Lieutenant-Governor, a Legislative Council of not fewer than seven, and a Legislative Assembly of not fewer than sixteen members, to be elected by the people. These representatives of the people, however, had little control over the Executive Council, and the result was the struggle for responsible government, i.e., the struggle to make the Executive Council responsible to the representatives of the people for its administration of the affairs of the community. This struggle culminated in the rebellion of 1837, after which Lord Durham's report paved the way for the introduction of responsible government and the union of the Canadas by the Act of Union (3-4 Vict., c. 35). The Legislative Assembly established under this Act consisted of 42 members from each province, increased to 65 from each province in 1853. The Legislative Council was to consist of at least 20 members, appointed for life. In 1854 permission was granted by the British authorities to change this system, and in 1856 appointments to the Legislative Council were made elective; each province was represented by 24 members, one-fourth of the total number retiring every two years.

**Present Constitution.**—By sections 69 and 70 of the British North America Act, the legislature of Ontario was established with a single elective chamber having 82 members, the Legislative Assembly. In 1874 the number of members was increased to 88, in 1885 to 90, in 1894 to 94, in 1902 to 98, in 1908 to 102 and in 1914 (4 Geo. V, chap. 4) to 111. It is elected for 4 years on an adult suffrage basis and holds annual sessions, so that 12 months shall not intervene between the last sitting in one session and the first sitting in the next. The powers of the Legislature are defined in sections 92 and 93 of the British North America Act. The Executive Council consists (1922) of eleven members, ten of them holding portfolios as follows: Prime Minister and President of Council; Attorney-General; Secretary and Registrar; Treasurer; Lands and Forests; Agriculture; Public Works and Highways; Education; Labour; Mines.

Besides the regular Departments, certain Commissions have been created for specific purposes. These include the Niagara Falls Park Commission, established in 1885, under an act for the preservation of natural scenery about Niagara Falls (48 Vict., chap. 21); the Railway and Municipal Board, established in 1906 by 6 Edw. VII, chap. 31, and entrusted with control of the construction, operation and maintenance of railways incorporated under Provincial Acts; the Hydro-Electric Power Commission, established in 1906 under an Act to provide for the transmission of electric power to municipalities (6 Edw. VII, chap. 15); the Timiskaming and Northern Ontario Railway Commission, created under the Timiskaming and Northern Ontario Railway Act in 1902, for the construction and operation of a railway from North Bay to a point on Lake Timiskaming, (the line was subsequently extended to Cochrane, to effect a junction with the National Trans-continental Railway).



**Municipal Government.**—Under the system established by the Constitutional Act of 1791, municipal administration was carried on in the main (as in the England of those days) by the courts of quarter sessions, whose members were appointed by and responsible to the governor in council. As urban communities began to grow, there commenced an agitation for local self-government, which after many rebuffs, resulted in 1832 in the grant to Brockville of a limited measure of control of the local police. In 1833 Hamilton and in 1834 Belleville, Cornwall, Port Hope and Prescott received similar powers, while in the latter year York became a self-governing city with a mayor, aldermen and councillors under the name of Toronto, Kingston receiving in 1838 a similar constitution, though being denied the name of city. These developments secured the cordial approval of Lord Durham, who maintained in his report (1839) that "the establishment of a good system of municipal institutions throughout this Province is a matter of vital importance. . . . The establishment of municipal institutions for the whole country should be made a part of every colonial constitution." Upon the introduction of responsible government, the District Councils Act of 1841 was passed, giving a considerable measure of local self-government with a large measure of control by the central authorities. A more comprehensive measure, the Municipal Act of 1849, provided "by one general law, for the erection of municipal corporations and the establishment of regulations of police in and for the several counties, cities, towns, townships and villages in Upper Canada." This Act has been called the *Magna Charta* of municipal institutions, not only for Ontario, but for the newer provinces which largely copied Ontario institutions. Its main features are still clearly visible in the municipal system of today.

Under this system there existed in 1868, when the first legislature of Ontario assembled, 539 local self-governing units, including 36 counties, 399 townships, and 104 cities, towns and villages. In 1921 there were in the Province 911 local self-governing units, including 38 county municipalities, 557 townships, 149 villages, 143 towns and 24 cities. There is thus a local self-governing body for every 3,200 of the population of the province, and the general effect has been to initiate the masses of the people in the problems of self-government, so that Ontario has been described by eminent students of democratic governments as one of the most perfect democracies in existence.

The present law respecting municipal institutions is contained in chapter 192 of the Revised Statutes of Ontario, 1914, and its amendments (4 Geo. V, c. 33, 5 Geo. V, c. 34, 6 Geo. V, c. 39).

The territorial division of the province for municipal and judicial purposes is governed by the Territorial Division Act (R.S.O., 1914, c. 3), section 11 of which provides that, subject to the provisions of the Municipal Act, the Lieutenant-Governor may by proclamation constitute and fix the boundaries of new townships in those parts of Ontario in which townships have not been already constituted.



**Townships and Villages.**—Township municipalities may be organized in hitherto unorganized territory when the population of the geographical township of six miles square is not less than 100, and where the inhabitants of an area not surveyed into townships exceed 100 on not more than 20,000 acres. The township is governed by a chief executive officer styled reeve, and four others who may be deputy reeves or councillors, depending on the number of municipal electors. (Deputy reeves, together with the reeve, represent the township on the county council). These provisions apply also to villages, which may be created out of districts or parts of townships where a population of 750 exists on an area not exceeding 500 acres. Police villages with certain limited rights of self-government may be formed by county councils where a population of not less than 150 exists upon an area of not less than 500 acres and where the majority of freeholders and resident tenants of the locality petition therefor. Police villages are administered by three trustees who may be created a body corporate where the population exceeds 500.

**Towns.**—Towns may be incorporated on conditions prescribed by the Ontario Railway and Municipal Board, but must have not less than 2,000 population. A town in unorganized territory is governed by a mayor and six councillors, or if the population is not less than 5,000, by a mayor and nine councillors. A town not in unorganized territory is governed by a mayor, a reeve, as many deputy reeves as the town is entitled to have as its representatives in the county council, and three councillors for each ward where there are less than five wards, or two councillors for each ward where there are five or more wards. Towns having not less than 5,000 population may, by by-law approved by the electors, withdraw from the jurisdiction of the county council. The towns of Walkerville, Prescott, Trenton, Smiths Falls, Brockville, Ingersoll, St. Marys, were in 1921 in this position.

**Cities.**—Cities, which are always entirely separate in government from their counties, must have, when constituted, a population of 15,000. They are governed by a mayor, a Board of Control if such exists, and, at the option of the council, two or three aldermen for each ward. Boards of Control, who may be elected by general vote in any city of more than 45,000 people and must be so elected in cities of over 100,000, form a sort of executive authority for the larger cities, giving a large portion of their time to the public service, and being paid a salary considerably higher than the alderman's indemnity. The duties of the Board of Control include the preparation of estimates, the awarding of contracts, the inspection of municipal works, and the nomination of officers and their dismissal or suspension. The Board reports to the council, in which its members also have a vote, and its action is subject to approval or reversal by the whole council. The council may not make appropriations or expenditures of sums not provided for by the Board's estimates, without a two-thirds vote of

the members present. Boards of control exist in Toronto, Ottawa, Hamilton and London.

**Counties.**—All members of county councils are also members of the councils of the municipalities within the larger county municipality, being the reeves and deputy reeves of townships, villages and towns. The presiding officer of the county council is called the warden, and is annually chosen from among the reeves who are members of the council. The county council has charge of the main highways and bridges, the courthouse, gaol, house of refuge, registry office, etc. Its rates are collected through the constituent local municipalities. Provisions for the erection of one kind of urban municipality into another are given in the Act. Four of the thirty-eight county municipalities of the province are composed of a union of counties, viz. (1) Leeds and Grenville, (2) Northumberland and Durham, (3) Prescott and Russell and (4) Dundas, Stormont and Glengarry.

**Use of the Referendum.**—Important questions and certain descriptions of by-laws are under the Municipal Act submitted to the direct vote of the electors, money by-laws generally to property-owners only. Except in the case of money by-laws, the decision of the electors is not legally binding upon the governing body of the municipality. Municipalities are empowered to pass by-laws to provide bonuses in aid of manufactures and railways; these bonuses may take the form of money grants, guarantees, total or partial exemption from municipal taxation or other special facilities.

**Judiciary.**—Under the Law Reform Act of 1909 (9 Edw. VII, c. 28), the Supreme Court of Ontario is established in two divisions, the appellate division and the high court division, the former being a continuation of the old court of appeal and the latter a continuation of the old high court of justice. The appellate division is composed of not less than two divisional courts, each with five justices, who try appeals from the high court and the other courts of the province, and from whose decision appeals may in certain cases be made to the Supreme Court of Canada. The justices of the high court hold assizes at least twice a year in each county, with a very comprehensive jurisdiction. In each county or district there is a court presided over by a judge, who sits at least twice a year, with or without a jury, to try minor civil actions. Each county judge also presides at least twice yearly over a court of general session, with a limited jurisdiction in criminal matters. Criminals may, with their own consent, be tried by the county judge without a jury. Each judicial district is divided into court divisions in each of which a division court is held by the county judge, or his deputy, at least once in every two months. These courts are for the recovery of small debts and damages. The county judges hold revision courts for the revision of assessment rolls and of voters' lists; they are also judges of the surrogate courts, which deal with the estates of deceased persons.

**MANITOBA, SASKATCHEWAN AND ALBERTA.**

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**HISTORICAL SKETCH.**

**Establishment of Provinces.**—On the prairies there have been two distinct trends of historical and political development—that of the Red River and that of the Territories. The whole region was originally under the sway of the Honourable Company of Adventurers trading into Hudson's Bay. In the case of the Red River, responsible self-rule came with the transfer to Canada. The Territories possessed absolutely no form of government prior to their incorporation in the Dominion.

**MANITOBA.**

On September 4, 1812, Captain Miles Macdonell, in the name of Lord Selkirk, took formal possession of the District of Assiniboia at the forks of the Red and Assiniboine Rivers. This was the first act of government in what is now Western Canada.

The deed of the District of Assiniboia to Selkirk reserved to the Company "all rights of jurisdiction." For this reason the Company's commission was given to the governor appointed by Selkirk. The governor could act as judge. But to do this correctly, he must act with his Council. A Council of Assiniboia was appointed to safeguard the judicial functions of the governor. It was not so much a Council of Assiniboia as the Council of the Governor in Assiniboia, not so much a legislative or administrative body as a judicial tribunal. From the time of Governors Bulger and Pelly the Council began to assume administrative and legislative functions. It began also to divest itself of judicial functions. In the former it was entirely successful; in the latter, only partly so. The minutes of the Council of May 4, 1832, show the Council launched upon its career of legislative activity. It adopted regulations concerning pigs and stallions allowed to range at large, fires, statute labour for the improvement of roads and bridges, public fairs and the taking of horses from their grazing grounds.

The Council never was in any degree responsible to those whose interest it was expected to regard and foster. But its membership was largely representative of the leaders in the community. It enacted a great variety of measures in relation to fires, animals, horse taking, hay, roads, intoxicating of Indians, liquor laws, customs duties, police, debtors, intestate estates, marriage licenses, contracts for service, surveyors, postal facilities, premium on wolves, administration of justice and other matters of general concern. On June 25, 1841, was formed the Municipal District of Assiniboia, which extended in all directions fifty miles from the forks of the Red and Assiniboine Rivers. To carry out its resolutions the Council of Assiniboia organized a board of works, a committee of economy, a volunteer corps, legal and judicial machinery, a tariff system and postal facilities. It appointed public officials and erected the necessary buildings. It



supervised the whole social life of the settlement, imposing duties and restrictions on the sale and importation of liquors, superintending the building of roads, the issue of marriage licenses and the encouragement of native industries.

The series of Dominion Acts relating to the West begins with "An Act for the temporary government of Rupert's Land and the Northwestern Territory when united with Canada," June 22, 1869. This Act sought to prepare for the transfer of the Territories from the local authorities to the government of Canada. A year later the Manitoba Act (33 Vict., c. 3) launched upon its independent constitutional career the old District of Assiniboia, now in possession of complete self-government. The Lieutenant-Governor in the first days of the province naturally occupied a very important position in the administration of affairs. For a short time there was a temporary government with two ministers and the Legislative Assembly. After this, government was carried on with the Legislative Assembly and a Legislative Council, but without a premier. At the end of six years the Legislative Council was abolished. Without a Legislative Council but with a Premier and a Legislative Assembly the province assumed the constitutional form which has endured to the present day.

#### SASKATCHEWAN AND ALBERTA.

The landmarks in the growth of provincial institutions for Manitoba are the coming of the Selkirk colonists, the development of the Council of Assiniboia, the passing of the Hudson's Bay Company as a governmental body, the enactment of the Manitoba Act and the abolition of the Legislative Council. The chief stages in the political development of the Northwest Territories (that portion of Rupert's Land and the Northwestern Territory not included in the province of Manitoba) are indicated by the capitals, Fort Garry, Swan River, Battleford and Regina. When the Government was at Fort Garry the Territories were administered by officials resident in a neighbouring province. In Livingstone, Swan River, the Lieutenant-Governor and councillors belonged for the first time to the Territories exclusively. Battleford marked the beginnings but only the beginnings of self-government. It was reserved to Regina to witness the evolution from the Northwest Council to the Legislative Assembly, from representative to responsible government, from territories to provinces.

The Territories were not at first given a separate government. They were administered from Fort Garry by the Lieutenant-Governor of Manitoba with the aid, first of a small executive council of three, irregularly appointed, the Hon. Mr. Justice Johnson, the Hon. D. A. Smith and the Hon. Pascal Breland, and then with the aid of a more formal and more regularly appointed but still admittedly provisional Northwest Council. This council addressed itself to the task of laying the foundations of territorial administration. It did much, also, to secure the goodwill of the Indian tribes.

The charter of the separate political existence of the Territories is the Northwest Territories Act, 1875. It was under this Act that the late Hon. David Laird was appointed Lieutenant-Governor. He



held a legislative session under the Act of 1875 at Livingstone, Swan River, in 1877. Battleford was the capital for three sessions of the council. The construction of the Canadian Pacific Railway transferred the seat of government to the line of railway, designated at first as Leopold, and then as Regina. Settlement ceased to follow the course of the rivers. Trade routes for freighters now began to run north and south from the railway. The old Northwest passed away.

At the same time a profound change was being effected in the constitutional character of the Territories. While the capital was still at Battleford, in 1881, Chief Factor Lawrence Clarke was elected to represent the district of Lorne. This constituted the first opportunity given the settlers themselves to express their sentiments in the administration of affairs. Three years later the elected representatives of the people became numerous enough to exert an influence upon legislation. The years that ensued were wonderfully formative. In 1884 the Northwest Council laid the foundations of the territorial school and municipal systems. The crushing of the half-breed uprising in 1885 assured the dominance of the white settlers and permanently banished the spectre of Indian disorders. A year later was established a territorial judiciary. Then followed a parliamentary struggle for the control of the purse. In quick succession came the Advisory Council, the Executive Committee, the Executive Council. In this contest between representatives of the settlers and the Dominion officials victory lay with the people and with the cause of popular government. It was not, however, till 1897, on the eve of a remarkable growth in population and economic development, that the government of the Territories, which for half a decade had been giving expression to the people's will, was made completely responsible in form as it had already been in fact.

The increased volume of immigration necessitated heavier expenditures upon education, public works and local administration. It was impossible to introduce municipal organizations into many districts outside the limits of the denser settlements. The result was to impose upon the Territorial Government excessive burdens. Financial embarrassments gave rise to constitutional aspirations. Finally, after a prolonged agitation, the Saskatchewan and Alberta Acts provided for the erection on September 1st, 1905, of two provinces, Saskatchewan and Alberta.

**Provincial Constitutions.**—The Constitutions of the Prairie Provinces are determined by the following Acts and their amendments: the British North America Act, the Manitoba Act (33 Vict., c. 3), the Saskatchewan Act (4-5 Edw. VII, c. 42), and the Alberta Act (4-5 Edw. VII, c. 3).

**Executive Power.**—Each province has a Lieutenant-Governor, appointed by the Dominion Government, who holds office for five years. Within his term he is not removable except for cause assigned, communicated to him in writing. His powers are exercised in accordance with the principles of responsible government, with the advice and consent of the provincial cabinet.

Each province has in its cabinet a Minister of Public Works, an Attorney-General, a Minister of Agriculture, a Provincial Treasurer, a Minister of Education and a Provincial Secretary. A feature peculiar to the prairie provinces is the Department of Municipal Affairs under the supervision of a Minister in Saskatchewan and Alberta, of a Commissioner in Manitoba. More than one department or sub-department is frequently under one responsible minister.

*Legislative Power.*—Each province has a Legislature consisting of the Lieutenant-Governor and the Legislative Assembly. There must be a yearly session. Though the Assembly may be dissolved at any time it must not continue longer than a fixed period of years after a general election. Section 92 of the British North America Act enumerates the exclusive powers of the Provincial Legislatures.<sup>1</sup>

#### GROWTH OF MUNICIPAL INSTITUTIONS.

**Manitoba.**—The stages in the growth of municipal institutions in the province of Manitoba are marked by the legislation of the years 1871, 1873, 1882 and 1900. In 1871 the County Assessment Act and the Parish Assessment Act made provision for dealing with local finance. The former concerned the tax roll of the province; the latter, purely local improvements and assessments for the parishes within each of the five counties. An Act of 1873 provided for the erection of a local municipality in districts containing not less than 30 freeholders. In 1883 the province was divided into 26 counties and three judicial districts. This Act copied closely the Ontario Act of 1849. In the working out of the Act it was found to be in many particulars unsuited to Western conditions. By the General Municipal Act of 1900 every city, town, village and rural municipality became a body corporate. Over all, excepting cities having separate charters of incorporation, of which there are three, Winnipeg, St. Boniface and Portage-la-Prairie, is the general supervision of a Department of Municipal Affairs, presided over by a Minister of the executive government called "The Municipal Commissioner." By legislation enacted in 1921 a "Tax Commission" was established in the province; its chief duties are to improve the character of municipal assessment throughout the province, especially in rural areas, which theretofore had been lax, unfair between ratepayers, and unreliable for general statistical purposes.

**Northwest Territories** (Saskatchewan and Alberta).—As early as 1884 we find among the Ordinances of the Northwest Territories one "respecting Municipalities." This contained provisions for the establishment of certain rural municipalities and the municipalities of the town of Regina, the town of Moosejaw, etc. Only a limited number of rural municipalities found practical existence under this Ordinance, which was planned on principles similar to those of the older provinces. In 1896 legislation was passed de-organizing certain of the rural municipalities where the system proved unpopular. In

<sup>1</sup> See page 6 for a résumé of the powers of the Provincial Legislatures.

1897 the Legislature of the Territories passed a Statute Labour Ordinance. The year following produced the Local Improvement Ordinance which, with its amendments, was the law observed until 1904. The average area of each local improvement district was one township. In 1903 a new local Improvement Bill de-organized all one-township local improvement districts and abolished the provision for statute labour. The new Bill provided for local improvement districts with an area of four townships, each of which was a division electing a councillor annually. The four thus secured formed a Council Board. In 1904 the Legislature made financial provision for inquiry into municipal organizations in general in order to provide a safe, economical system of rural municipalities and to improve the ordinance under which cities, towns and villages were administered. The breaking up of the Territories in 1905 into the present provinces of Alberta and Saskatchewan caused delays; but municipal commissions with urban and rural sections were appointed. As a result of the experience gathered during territorial days and later, and of the findings of these Commissions, Local Improvement Acts were amended, Rural Municipality, Town and Village Acts were passed in both provinces, and a City Act was passed in the province of Saskatchewan.

**Municipal Government.**—The school district constitutes at once the most important and elementary unit of self-government on the prairies. Of municipal organization there are generally five different forms: (a) Improvement Districts; (b) Rural Municipalities; (c) Villages; (d) Towns; (e) Cities.

Alberta has five forms of municipal organization, Improvement Districts, Municipal Districts, Villages, Towns, Cities. Improvement Districts are administered by the Department of Municipal Affairs. Each city is governed by the provisions of its own charter.

In Manitoba the term "Improvement District" is used to denote a portion of a rural municipality or incorporated village formed into a particular territory to provide for local improvements.

**School Districts.**—The school district is the local organization for the support and administration of educational affairs. In each of the three Prairie Provinces its organization is somewhat different according as it is a rural, village, town or city or consolidated district, but the most common of these, the rural district, is in all three provinces governed by a board of three trustees elected by the ratepayers for three years, one being elected and one retiring annually. In Manitoba there is in addition to the types of district mentioned, a rural municipality school organization, being an aggregation of rural schools under one board of trustees.

**Improvement Districts.**—These consist, except in Manitoba, of those sparsely settled areas where there exists either no municipal organization whatever or organization of a very simplified and elementary character. As a rule each local improvement district has exactly the same area as the rural municipality into which it may subsequently be transformed. This is generally the territorial unit of 18 miles



square or nine townships. The form and size of these units occasionally vary to fit into the physical features of the country. The local improvement district is not regarded as a permanent organization. In Saskatchewan, the local improvement, public revenues and wild lands taxes are collected by the Department of Municipal Affairs. The local improvement taxes are expended for public works through the Department of Highways in the particular local improvement district in which they are collected. A certain portion of these taxes is also expended for wolf bounties and the extermination of gophers and grasshoppers.

*Rural Municipalities.*—The rural municipality is a permanent institution and a body corporate. It passes by-laws for the general welfare of the community. These relate to such matters as public health, nuisance grounds, cemeteries, hospitals, granting aid to the sick and worthy indigent, providing for tree planting in public places, imposing fines for light weight and short measurements, preventing cruelty to animals, restraining the running at large of dogs, the application of herd and pound laws, preventing prairie fires, licensing hawkers and pedlars, regulating speed on highways, granting aid to agricultural societies, the destruction of noxious weeds, the acquiring of land for public purposes, the erection of municipal buildings and similar matters. It has charge of the collection of school taxes in rural districts within the limits of the municipality. In order to perform permanent improvements a rural municipality can borrow by debentures.

The rural municipalities have authority to collect certain license fees, but taxation constitutes their principal source of revenue. Each council appoints its own auditor, but the books of the municipality are subject to departmental inspection. Under conditions that vary with the provinces the electors of the municipalities may vote to come into provincial, group or co-operative hail insurance schemes. They are not allowed to bonus railways or commercial enterprises of any kind. The method of election varies with the provinces. In Alberta, for instance, the council is generally elected at large by the electors of the municipality, though the council may, by by-law approved by a majority of the electors, provide for the election of councillors by divisions, and the reeve is chosen at the first meeting of the council; in Saskatchewan the reeve only is elected at large and each of the six councillors is chosen by a division of a township and a half; in Manitoba the Council consists of the reeve and six or four councillors as determined by by-law. A secretary-treasurer appointed by the council levies the assessment and collects the taxes.

*Villages.*—In Saskatchewan 50 people must be actually resident in a hamlet before it can claim village incorporation. The number is counted by a person sent from the Department of Municipal Affairs. Each village shall levy, for taxation purposes, on land at its fair actual value, and on buildings and improvements at 60 p.c. of their value, but if two-thirds of the resident ratepayers desire, by written petition, that the assessment shall be based on land values only, the council may pass a by-law to that effect.



Under the Village Act of Alberta, a village is not a corporate body and has only very limited powers. A village may be established where there is any centre of population containing 25 occupied dwelling-houses within an area not greater than 640 acres. The tax, which may not exceed 2 cents on the dollar, must be levied on the actual value of the lands in the village exclusive of the improvements thereon. A village may impose a business tax. It may assess improvements up to 50 p.c. of their value and must do so if any debenture payment owing by the village is in arrears. A village may borrow money by debentures after obtaining authority from the Minister of Municipal Affairs.

In Manitoba, villages, as in the case of towns and cities, excepting Winnipeg and St. Boniface, are incorporated under the Municipality Act. A village must have 500 inhabitants within 640 acres. The census is taken under the direction of the council of the municipality. The council consists of the mayor and four councillors. The village council, as in the case of the council of every municipality in Manitoba, may pass by-laws for exempting any industry in whole or in part from taxation for any period not exceeding 20 years.

*Towns.*—In Saskatchewan a village must have at least 500 people actually resident therein, in order to become a town. The census must be taken by an official of the Department. Land is assessed at its fair actual value and improvements at not more than 60 p.c. of their value. A town may impose a tax on personal property and may also impose an income tax. It may also impose a tax on improvements and must do so if any debentures owing by the town are in arrears. Power has been given to establish parks and recreation grounds, skating and curling rinks.

In Alberta a village having 700 residents may be established as a town. The Act requires that all taxes must be derived from an assessment levied according to the actual cash value of the land without regard to any improvements made thereon by the expenditure of capital or labour.

In Manitoba a locality containing over 1,500 inhabitants may be erected into a town on petition. The council consists of the mayor and two councillors from each ward.

*Cities.*—In Alberta there is no City Act. The different cities in the province carry on business each under its own special charter. Accordingly the methods differ in the different cities. Where in other provinces common regulations exist, here can only be observed tendencies. They are strongly inclined to own their own utilities, not to give franchises and to exempt personal property and incomes from taxation. Buildings and improvements are assessed for a percentage of their value and taxed on this percentage, which varies in different cities.

In Saskatchewan towns must have a population of 5,000 to become cities. A general City Act governs in each case. This strictly prohibits the granting of bonuses. A Saskatchewan city may at its own volition assess land values, exempting buildings and improvements, but the change must be gradual. Land is assessed at its fair actual value and buildings at not more than 60 p.c. of their value.

The three provinces of the prairies have each a different method in regard to the appointment of city commissioners. In Manitoba is found the board of control, in Saskatchewan the appointed commissioner, in Alberta the elected commissioner and appointed commissioner.

In Manitoba, a town containing over 10,000 inhabitants may be erected into a city with a council consisting of the mayor and two aldermen from each ward.

In all three provinces, cities, towns, villages and rural municipalities may pass by-laws for contracting debts by borrowing money or otherwise, and, if necessary, for issuing debentures for certain specified purposes, but in all cases the by-laws for borrowing money must receive the assent of the electors. Particularly in connection with the smaller municipalities the limit of debt is specifically stated in the various acts governing the cases.

The legislative powers of the councils of municipalities in the three prairie provinces are in the main the same,—acquiring property for municipal or public purposes, taking census, appointing engineers, constables and other officers, enforcement of by-laws, regulations regarding public health and comfort, public safety, public order and morality, protection from fire, care of children, regulation of streets and public places, drainage and sewerage, fences, dairies, water supply, matters relating to agriculture, public fairs, animals, dog taxes, impounding, cemeteries, coal and wood supply, libraries, advertising, markets, boards of trade, trades and occupations, licensing travellers for commercial houses, street numbering and similar matters.

### BRITISH COLUMBIA.

By JOHN HOSIE, Victoria, B.C.

British Columbia entered Confederation on July 20, 1871, and has a local constitution similar to that of the other provinces. The province had been constituted in 1866 by the union of the colony of Vancouver Island and its dependencies (where a government had been established in 1849) with that of British Columbia, which dated from 1858. Local responsible government began before Confederation, but previously the colonies had been administered by two mixed elective and appointed councils.

**Executive.**—The Lieutenant-Governor and a cabinet not to exceed twelve ministers constitute the present administration. The cabinet is composed of the following: the Premier, who is also Minister of Railways and President of the Council; Attorney-General and Minister of Labour; Minister of Finance and Minister of Industries; Provincial Secretary and Minister of Education; Minister of Lands; Minister of Mines and Commissioner of Fisheries; Minister of Public Works; Minister of Agriculture. With the exception of the Premier, who holds two other offices and receives \$9,000 a year in respect of his position as Premier only (the portfolio of President of the Council is unpaid), each minister receives \$7,500 a year. The first cabinet after Confederation consisted of five members. In 1900 the Department

of Mines was separated from other portfolios, with a Minister of its own, but the Fisheries Department is now associated with that of Mines. Lands and Public Works, which had long been under one Minister, were separated in 1908. In 1916, Agriculture, previously under the jurisdiction of the Minister of Finance, became a Department with a Minister of its own.

**Legislative.**—Unlike Quebec and Nova Scotia, British Columbia has a single chamber legislature, consisting of 47 members. The first Assembly after Confederation had 25 members, but redistribution has been necessitated from time to time by increase of population, especially in the cities. Vancouver's representation has been increased from 2 members in 1894 to 6 at present, elected at large. Victoria returns 4 members, while the other 36 ridings are one-member constituencies. The term of the Legislative Assembly, formerly four years, was increased to five years in 1913 by amendment to the Constitution Act. The sessional indemnity of members is \$2,000, and an allowance of \$2,000 is made to the recognized leader of the opposition in addition to his indemnity. The Speaker's additional allowance is \$1,800, and that of the Deputy-Speaker \$500.

**Judicial.**—The courts of the Province in the order of authority are as follows:

1. Court of Appeal, consisting of a Chief Justice and four puisne judges styled Justices of Appeal. The appellate jurisdiction of this Court is wide, covering appeals from all judgments and orders of the Supreme Court, appeals from the County Courts, appeals from the opinion of a Judge of the Supreme Court on constitutional questions referred to him by the Lieutenant-Governor in Council, etc. It is also the Court of Appeal for the Province in all criminal cases under the Criminal Code of Canada.

2. The Supreme Court, consisting of a chief justice and five puisne judges. It has general jurisdiction throughout the Province as a superior Court of Record, and there are certain appeals under provincial legislation which are heard before it. Its jurisdiction is exercisable by each individual judge as and for the Court.

3. County Courts, of which there are nine. These have jurisdiction in all personal actions where the amount involved does not exceed \$1,000; in actions of ejectment where the value of the premises does not exceed \$2,500; in equity cases where the amount involved does not exceed \$2,500. They have wide jurisdiction under the provincial mining acts, and upon appeals from Small Debts Courts. The administration of criminal justice is also largely in their hands.

4. Small Debts Courts, with jurisdiction in personal actions up to \$100. They are presided over by judges appointed by the provincial government.

In addition to above Courts there are many stipendiary magistrates and justices of the peace, exercising a more or less limited jurisdiction under the Criminal Code of Canada as well as under the Summary Convictions Act.



**Police.**—Under the Attorney-General are the Provincial Police, with general jurisdiction, maintaining order in the unorganized districts, looking after the Indians, lending assistance to local authorities in the pursuit of criminals, and co-operating when need arises with the Royal Canadian Mounted Police. There are the usual detective and constabulary forces maintained by the municipalities.

**Agriculture.**—The Department of Agriculture is organized with a minister, a deputy minister and various heads of branches, including a live stock commissioner, provincial horticulturist, instructors in poultry raising, inspectors of fruit pests, market commissioner, veterinary inspectors, dairy commissioner, plant pathologist, and soil and crop experts.

**Land Settlement Board.**—The Land Settlement Board created in 1917, has power to take over from the Crown and to acquire from private owners, either by purchase or compulsorily, land within the Province for agricultural purposes, to develop such land and erect buildings thereon and to sell or lease said lands, etc. Loans may be made for acquiring lands for agricultural purposes, satisfaction of encumbrances on same, clearing, draining, dyking, water storage, irrigation works, erection of farm buildings, purchase of live stock, etc. Loans must be secured by first mortgages on surveyed agricultural lands, and must not exceed 60 per cent of the appraised value of the property with a minimum of \$250 and a maximum to any one borrower of \$10,000. Long dated loans on amortizable plan may be for 15, 20, or 25 years. Short dated loans, straight or amortizable, may be made for not less than 3 years and not more than 10 years, and must not exceed \$5,000 to any individual, or \$10,000 to an association.

**Lands.**—The Department of Lands is under a minister and deputy minister, a surveyor-general, chief forester, geographer, irrigation supervisors, superintendent of soldiers' settlement, and other officials. It maintains a forest protection service, with a staff of rangers to guard against the destruction of timber by forest fires. From time to time areas have been withdrawn from sale and reserved for pre-emption or homesteads. By legislation of 1916, the lands previously sold on deferred payments, on which unpaid amounts remained, reverted to the extent of the amount unpaid for, and are held as homesteads for returned soldiers. Under the provincial returned soldiers' land settlement scheme various concessions are made to returned men taking up land, and this, in conjunction with the Dominion provisions of a like nature, has resulted in the successful placement of many men, sometimes in colonies or groups (as at Merville and Creston) or individually. Similarly, a large number of returned men have availed themselves of the advantages of the Better Housing Act, 1919.

**Fisheries.**—The administration of the fisheries is in the hands of the Commissioner of Fisheries, who is also Minister of Mines. Among other things the department regulates the fish canneries, the inland fisheries, and in co-operation with the federal authorities



maintains stations and a staff for the study of the habits of fish, methods of propagation, preservation and protection.

**Education.**—The Department of Education is under a Minister who is also Provincial Secretary. The Superintendent of Education has the rank of a deputy minister. Supervision is in the hands of two high school inspectors, sixteen inspectors of schools, and one inspector of manual training schools. The system is non-sectarian. Attendance is compulsory from the age of 7 to 14. The provincial university was authorized by legislation in 1908, but was not opened until 1915. It confers degrees in Arts, Applied Science and Agriculture, and has power to grant degrees in all branches except theology.

Other educational institutions include two normal schools and over forty high schools. There are also night schools for instruction in academic and technical subjects. Manual training and household science departments are in operation in many high schools and elementary schools.

The maintenance of all city and town schools, and a large majority of the rural schools, is provided for by local or district assessment, supplemented by grants from the provincial treasury. Control of these schools is vested in the local authorities, subject to the regulations of the department. There are, however, in the more scattered districts, certain rural schools which are more directly under the control of the government. Cities and organized municipalities elect their boards by popular vote. These boards appoint municipal inspectors and other officers.

**Municipal Government.**—Local administration is at present based on the Municipal Act and amending statutes, together with the Village Municipalities Act. Large powers of local self-government are conferred by the existing system. An urban municipality may be formed by a community of not less than 100 male British subjects, provided the owners of more than half of the land petition for it. District municipalities may be organized by 30 resident male British subjects of full age. Village municipalities may be formed by petition where the number of residents does not exceed 1,000, but the provisions of the Municipal Act shall not apply thereto. The city organizations are of the same general type, differing only in details. In all, the chief executive officer is the mayor, and all have elective councils.

The Municipal Act has provision for the Board of Control, but neither this nor the Commission system is in operation. All the larger cities have dropped the ward system. Vancouver, the largest city, has reduced its council to eight members. The municipal franchise for ordinary purposes is open to adult male residents and to female householders and real estate owners. Only owners of real estate, male or female, may vote on money by-laws. Such by-laws are necessary for expenditures beyond the ordinary revenue, requiring the issue of debentures. They require a three-fifths majority of the votes cast.

The chief executive of a district municipality is the reeve. In most other respects the district municipality is similar to the city government. In cities, with the exception of Vancouver, the police are under the authority of a commission, composed of the mayor and two members elected in the same manner and at the same time as the mayor and aldermen or councillors. Vancouver's police commission is composed of three members, the mayor and two members appointed by the Lieutenant-Governor in Council, one of whom must be a member of the city council.

While the general municipal system is established by common legislation, several municipalities have secured certain modifications by special enactment. Each has its own system of assessment and taxation. Vancouver, for example, levies taxes upon fifty per cent of the value of improvements.

Under the Municipal Cemeteries Act, 1921, municipalities are given power to establish cemeteries, mausoleums and crematoriums. Two or more municipalities may act together in the matter, with a joint board of control appointed by the respective councils.

Aid is now given the municipalities from the receipts from Government sale of liquor, from receipts for motor licenses, and from a newly imposed tax on betting at race meetings. The apportionment of such moneys is on a basis of population.

**Provincial Taxes.**—British Columbia imposes direct taxation on its natural resources. These taxes include a small assessment on real and personal property, wild land, timber and coal land, also a graduated income tax, taxes on corporations, succession duties, and other license fees.

### III.—CHRONOLOGICAL HISTORY OF CANADA.

#### 1497 TO 1921.

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| 1497. June 24, Eastern coast of North America discovered by John Cabot.  | 1603. June 22, Champlain's first landing in Canada, at Quebec.                                   |
| 1498. Cabot discovers Hudson Strait.   | 1605. Founding of Port Royal (Annapolis, N.S.).  |
| 1501. Gaspar Corte Real visits Newfoundland and Labrador.  | 1608. Champlain's second visit. July 3, Founding of Quebec.                                      |
| 1524. Verrazano explores the coast of Nova Scotia.   | 1609. July, Champlain discovers Lake Champlain.  |
| 1534. June 21, Landing of Jacques Cartier at Esquimaux Bay.  | 1610-11. Hudson explores Hudson Bay and James Bay.   |
| 1535. Cartier's second voyage. He ascends the St. Lawrence to Stadacona (Quebec) (Sept. 14) and Hochelaga (Montreal) (Oct. 2). | 1611. Brulé ascends the Ottawa River.  |
| 1541. Cartier's third voyage.  | 1612. Oct. 15, Champlain made lieutenant-general of New France.                                  |
| 1542-3. De Roberval and his party winter at Cap Rouge, and are rescued by Cartier on his fourth voyage.                        | 1613. June, Champlain ascends the Ottawa River.  |
| 1557. Sept. 1, Death of Cartier at St. Malo, France.   | 1615. Champlain explores Lakes Nipissing, Huron and Ontario. (Discovered by Brulé and Le Caron). |
| 1592. Straits of Juan de Fuca discovered by de Fuca.   | 1616. First schools opened at Three Rivers and Tadoussac.  |
|  | 1620. Population of Quebec, 60 persons.  |

1621. Code of laws issued, and register of births, deaths and marriages opened in Quebec.
1622. Lake Superior discovered by Brulé.
1623. First British settlement of Nova Scotia.
1627. New France and Acadia granted to the Company of 100 Associates.
1628. Port Royal taken by Sir David Kirke.
1629. April 24, Treaty of Susa between France and England. July 20, Quebec taken by Sir David Kirke.
1632. March 29, Canada and Acadia restored to France by the Treaty of St. Germain-en-Laye.
1633. May 23, Champlain made first governor of New France.
1634. July 4, Foundation of Three Rivers.
- 1634-35. Exploration of the Great Lakes by Nicolet.
1635. Dec. 25, Death of Champlain at Quebec.
1636. March 10, De Montmagny appointed governor.
1638. June 11, First recorded earthquake in Canada.
1640. Discovery of Lake Erie by Chamorrot and Brébeuf.
1641. Resident population of New France, 240.
1642. May 17, founding of Ville-Marie (Montreal).
1646. Exploration of the Saguenay by Dablon.
1647. Lake St. John discovered by de Quen.
1648. March 5, Council of New France created. Aug. 20, D'Ailleboust de Coulonges governor.
1649. March 16-17, Murder of Fathers Brébeuf and Lalemant by Indians.
1651. Jan. 17, de Lauzon governor.
1654. Aug., Acadia taken by an expedition from New England.
1655. Nov. 3, Acadia restored to France by the Treaty of Westminster.
1657. Jan. 26, Vicomte d'Argenson governor.
1659. June 16, François de Laval arrives in Canada as Vicar-Apostolic.
1660. May 21, Dollard des Ormeaux and sixteen companions killed at the Long Sault, Ottawa River.
1661. Baron d'Avaugour governor.
1663. Company of 100 Associates dissolved. Feb. 5, severe earthquake. April, Sovereign Council of New France established. May 1, Saffray de Mézy governor, Population of New France 2,500. of whom 800 were in Quebec.
1664. May, Company of the West Indies founded.
1665. March 23, de Courcelle governor. Population of New France, 3,215.
1667. July 21, Acadia restored to France by the Treaty of Breda. White population of New France, 3,918.
1668. Mission at Sault Ste. Marie founded by Marquette.
1670. May 13, charter of the Hudson's Bay Company.
1671. Population of Acadia, 441.
1672. Population of New France, 6,705. April 6, Comte de Frontenac governor.
1673. June 13, Cataraqui (Kingston) founded.
1674. Oct. 1, Laval becomes first Bishop of Quebec.
1675. Population of New France, 7,832.
1678. Niagara Falls visited by Hennepin.
1679. Ship *Le Griffon* built on Niagara river above the Falls by La Salle. Population of New France, 9,400; of Acadia, 515.
1682. May 1, de la Barre governor. Frontenac recalled.
1683. Population of New France, 10,251.
1685. Jan. 1, Marquis de Denonville governor. Card money issued.
1686. Population of New France, 12,373; of Acadia, 885.
1687. March 18, La Salle assassinated.
1689. June 7, Frontenac reappointed governor. Aug. 5, Massacre of whites by Indians at Lachine.
1690. May 21, Sir William Phipps captures Port Royal, but is repulsed in an attack on Quebec (Oct. 16-21).
1691. Kelsey of the Hudson's Bay Co., reaches the Rocky Mountains.
1692. Population of New France, 12,431. Oct. 22, Defence of Verchères against Indians by Magdeleine de Verchères.
1693. Population of Acadia, 1,009.
1697. Sept. 20, by the Treaty of Ryswick, places taken during the war are mutually restored. D'Iberville defeats the Hudson's Bay Co.'s ships on Hudson Bay.
1698. Nov. 28, death of Frontenac. Population of New France, 15,355.
1699. April 20, de Callière governor.
1703. June 16, Sovereign Council of Canada becomes Superior Coun-

- cil and membership increased from 7 to 12.
1705. Aug. 1, Marquis de Vaudreuil governor.
1706. Population of New France, 16,417.
1709. British invasion of Canada.
1710. Oct. 13, Port Royal taken by Nicholson.
1711. Sept. 1, Part of Sir H. Walker's fleet, proceeding against Quebec, wrecked off the Seven Islands.
1713. April 11, Treaty of Utrecht. Hudson Bay, Acadia and Newfoundland ceded to Great Britain. Aug., Louisbourg founded by the French. Population of New France, 18,119.
1720. Population of New France, 24,234, of Isle St. Jean (P.E.I.) about 100. April 25, Governor and Council of Nova Scotia appointed.
1721. June 19, burning of about one half of Montreal.
1725. Oct. 10, death of Vaudreuil.
1726. June 11, Marquis de Beauharnois governor.
1727. Population of New France, 30,613.
1728. Population of Isle St. Jean (P.E.I.) 330.
1731. Population of the north of the peninsula of Acadia, 6,000.
1734. Road opened from Quebec to Montreal. Population of New France, 37,716.
1737. Iron smelted at St. Maurice. French population of the north of the Acadia peninsula, 7,598.
1739. Population of New France, 42,701.
1745. June 17, taking of Louisbourg by Pepperell and Warren.
1747. Marquis de La Jonquière appointed governor, captured at sea by the English, took office Aug. 15, 1749.
1748. Oct. 18, Treaty of Aix-la-Chapelle. Louisbourg restored to France in exchange for Madras.
1749. June 21, Founding of Halifax. British immigrants brought to Nova Scotia by Governor Cornwallis, 2,544 persons. Fort Rouillé (Toronto) built.
1750. St. Paul's Church, Halifax (oldest Anglican church in Canada), built.
1752. March 25, Issue of the Halifax "Gazette," first paper in Canada. British and German population of Nova Scotia, 4,203. May 17, Death of La Jonquière, July, Marquis Duquesne de Menneville governor.
1754. Population of New France, 55,009.
1755. July 10, Marquis de Vaudreuil-Cavagnal governor. Sept. 10, Expulsion of the Acadians from Nova Scotia.
1756. War (Seven Years') between Great Britain and France.
1758. July 26, Final capture of Louisbourg by the British. Oct. 7, First meeting of the Legislature of Nova Scotia.
1759. July 25, Taking of Fort Niagara by the British. July 26, Beginning of the Siege of Quebec. July 31, French victory at Beauport Flats. Sept. 13, Defeat of the French on the Plains of Abraham. Death of Wolfe. Sept. 14, Death of Montcalm. Sept. 18, Surrender of Quebec.
1760. April 28, Victory of the French under Levis at Ste. Foy. Sept. 8, Surrender of Montreal. Military rule set up in Canada. Population of New France, 70,000.
1762. British population of Nova Scotia, 8,104. First British settlement in New Brunswick.
1763. Feb. 10, Treaty of Paris by which Canada and its dependencies are ceded to the British. May, Rising of Indians under Pontiac, who take a number of forts and defeat the British at Bloody Run (July 31). Oct. 7, Civil government proclaimed. Cape Breton and Isle St. Jean annexed to Nova Scotia; Labrador, Anticosti and Magdalen Islands to Newfoundland. Nov. 21, General Jas. Murray appointed governor in chief. First Canadian post offices established at Montreal, Three Rivers and Quebec.
1764. June 21, First issue of the Quebec "Gazette." Aug. 13, Civil government established.
1765. Publication of the first book printed in Canada, "Catéchisme du Diocèse de Sens." May 18, Montreal nearly destroyed by fire. Population of Canada, 69,810.
1766. July 24, Peace made with Pontiac at Oswego.
1768. Charlottetown, P.E.I., founded. April 11, Great fire at Montreal. April 12, Sir Guy Carleton (Lord Dorchester) governor in chief.
1769. Isle St. Jean (Prince Edward Island) separated from Nova Scotia, with governor and council.



- 1770-72. Hearne's journey to the Coppermine and Slave Rivers and Great Slave Lake.
1773. Suppression of the order of Jesuits in Canada and escheat of their estates.
1774. June 22, The Quebec Act passed.
1775. May 1, The Quebec Act comes into force. Outbreak of the American Revolution. Montgomery and Arnold invade Canada. Nov. 12, Montgomery takes Montreal; Dec. 31, is defeated and killed in an attack on Quebec.
1776. The Americans are defeated and driven from Canada by Carleton.
1777. Sept. 18, General Frederick Haldimand governor in chief.
1778. Captain Jas. Cook explores Nootka Sound and claims the north-west coast of America for Great Britain. June 3, First issue of the Montreal "Gazette."
1783. Sept. 3, Treaty of Versailles, recognizing the independence of the United States. Organization of the Northwest Company at Montreal. Kingston, Ont., and St. John, N.B., founded by United Empire Loyalists.
1784. Population of Canada, 113,012. United Empire Loyalists settle in Upper Canada and found Fredericton, N.B. Aug. 16, New Brunswick and (Aug. 26) Cape Breton separated from Nova Scotia.
1785. May 18, Incorporation of Parrtown (St. John, N.B.).
1786. April 22, Lord Dorchester governor in chief. Oct. 23, Government of New Brunswick moved from St. John to Fredericton.
1787. C. Inglis appointed Anglican bishop of Nova Scotia—first colonial bishopric in the British Empire.
1788. King's College, Windsor, N.S., opened. Sailing packet service established between Great Britain and Halifax.
1789. Quebec and Halifax Agricultural Societies established.
1790. Spain surrenders her exclusive rights on the Pacific coast. Population of Canada, 161,311. (This census does not include what becomes in the next year Upper Canada.)
1791. The Constitutional Act divides the province of Quebec into Upper and Lower Canada, each with a lieutenant-governor and legislature. The Act goes into force Dec. 26. Sept. 12, Colonel J. G. Simcoe, lieutenant-governor of Upper Canada.
1792. July 8, Simcoe sworn in at Kingston. Sept. 17, First legislature of Upper Canada opened at Newark (Niagara). Dec. 17, First legislature of Lower Canada opened at Quebec. Vancouver Island circumnavigated by Vancouver.
1793. April 18, First issue of the "Upper Canada Gazette." June 28, Jacob Mountain appointed first Anglican bishop of Quebec. July 9, Importation of slaves into Upper Canada forbidden. Rocky Mountains crossed by (Sir) Alexander Mackenzie. York (Toronto) founded by Simcoe.
1794. Nov. 19, Jay's Treaty between Great Britain and the United States.
1795. Pacific Coast of Canada finally given up by the Spaniards.
1796. Dec. 15, General Robert Prescott governor in chief. Government of Upper Canada moved from Niagara to York (Toronto).
1798. St. John's Island (population 4,500) re-named Prince Edward Island.
1799. April 10, Lieut.-General Peter Hunter lieutenant-governor of Upper Canada.
1800. Foundation of New Brunswick College, Fredericton (now University of N.B.). The Rocky Mountains crossed by David Thompson.
1803. Settlers sent by Lord Selkirk to Prince Edward Island.
1806. Jan. 22, Francis Gore, lieutenant-governor of Upper Canada. Nov. 22, Issue of "Le Canadien"—first wholly French newspaper. Population—Upper Canada, 70,718; Lower Canada, 250,000; New Brunswick, 35,000; P.E.I., 9,676.
1807. Aug. 29, Sir James Craig governor in chief. Simon Fraser explores the Fraser River. Estimated population of Nova Scotia, 65,000.
1809. Nov. 4, First Canadian steamer runs from Montreal to Quebec.
1811. Lord Selkirk's Red River Settlement on land granted by the

- Hudson's Bay Company. Oct. 21, Sir George Prevost governor in chief.
1812. June 18, Declaration of War by the United States. July 12, Americans under Hull cross the Detroit River. Aug. 16, Detroit surrendered by Hull to Brock. Oct. 13, Defeat of the Americans at Queenston Heights and death of Gen. Brock.
1813. Jan. 22, British victory at Frenchtown. April 27, York (Toronto) taken and burned by the Americans. June 5, British victory at Stoney Creek. June 24, British, warned by Laura Secord, captured an American force at Beaver Dams. Sept. 10, Commodore Perry destroys the British flotilla on lake Erie. Oct. 5, Americans under Harrison defeat the British at Moraviantown. Tecumseh killed. Oct. 26, Victory of French-Canadian troops under de Salaberry at Chateaugay. Nov. 11, Defeat of the Americans at Crysler's Farm. British storm Fort Niagara and burn Buffalo.
1814. March 30, Americans repulsed at La Colle. May 6, Capture of Oswego by the British. July 5, American victory at Chippawa. July 25, British victory at Lundy's Lane. July, British from Nova Scotia invade and occupy Northern Maine. Sept. 11, British defeat at Plattsburg on lake Champlain. Dec. 24, Treaty of Ghent ends the war. Population — Upper Canada, 95,000; Lower Canada, 335,000.
1815. July 3, Treaty of London regulates trade with the United States. The Red River Settlement destroyed by the Northwest Company but restored by Governor Semple.
1816. Mar. 25, Sir John Sherbrooke governor in chief. June 19, Governor Semple killed. The Red River Settlement again destroyed.
1817. July 18, First treaty with the Northwest Indians. Lord Selkirk restores the Red River Settlement. Opening of the Bank of Montreal; first note issued Oct. 1. Population of Nova Scotia, 81,351.
1818. Jan. 6, Major-General Sir Peregrine Maitland lieutenant-governor of Upper Canada. May 8, the Duke of Richmond governor in chief. Oct. 20, Convention at London regulating North American fisheries. Dalhousie College, Halifax, founded. Bank of Quebec founded.
1819. Aug. 28, Death of the Duke of Richmond.
- 1819-22. Franklin's overland Arctic expedition.
1820. April 12, The Earl of Dalhousie governor in chief. Oct. 16, Cape Breton re-annexed to Nova Scotia.
1821. March 26, The Northwest Company absorbed by the Hudson's Bay Company. Charter given to McGill College.
1822. Population of Lower Canada, 427,465.
1824. Population of Upper Canada, 150,066; of New Brunswick, 74,176.
1825. Oct. 6, Great fire in the Miramichi district, N.B. Opening of the Lachine Canal. Population of Lower Canada, 479,288.
1826. Founding of Bytown (Ottawa).
1827. Sept. 29, Convention of London relating to the territory west of the Rocky mountains. Population of Nova Scotia, including Cape Breton, 123,630.
1828. Aug. 23, Major-General Sir John Colborne lieutenant-governor of Upper Canada. The Methodist Church of Upper Canada separated from that of the United States.
1829. Nov. 27, First Welland Canal opened. Upper Canada College founded.
1830. Nov. 24, Lord Aylmer governor in chief.
1831. June 1, The North Magnetic Pole discovered by (Sir) James Ross. Population — Upper Canada, 236,702; Lower Canada, 553,131; Assiniboia, 2,390.
1832. Outbreak of cholera in Canada. Incorporation of Quebec and Montreal. Bank of Nova Scotia founded. May 30, Opening of the Rideau Canal.
1833. Aug. 18, The Steamer *Royal William*, built at Quebec, leaves Pictou for England.
1834. Feb. 21, The Ninety-two Resolutions on public grievances passed by the Assembly of Lower Canada. Mar. 6, Incorporation of

- Toronto. Population of Upper Canada, 321,145; of New Brunswick, 119,457; of Assiniboia, 3,356.
1835. July 1, Lord Gosford governor in chief. Nov. 30, Sir Francis Bond Head lieutenant-governor of Upper Canada.
1836. July 21, Opening of the first railway in Canada from Laprairie to St. John's, Que. Victoria University opened at Cobourg (afterwards moved to Toronto).
1837. Report of the Canada Commissioners. Rebellions in Lower Canada (Papineau) and Upper Canada (W. L. Mackenzie). Nov. 23, Gas lighting first used in Montreal. Dec. 22, Major-General Sir G. Arthur lieutenant-governor of Upper Canada.
1838. Feb. 10, Constitution of Lower Canada suspended, and Special Council created. March 30, The Earl of Durham governor in chief. April 27, Martial law revoked. June 28, Amnesty to political prisoners proclaimed. Nov. 1, Lord Durham, censured by British parliament, resigns. Dec. 13, Sir John Colborne governor in chief. Population—Upper Canada, 399,422; Assiniboia, 3,966; Nova Scotia, 202,575.
1839. Feb. 11, Lord Durham's report submitted to parliament. Sept. 6, C. Poulett Thomson (Lord Sydenham) governor in chief. John Strachan made first Anglican bishop of Toronto.
1840. July 23, Passing of the Act of Union. First ship of the Cunard line arrives at Halifax. July 28, death of Lord Durham.
1841. Feb. 10, Union of the two provinces as the province of Canada, with Kingston as capital. Feb. 13, Draper-Ogden administration. April 10, Halifax incorporated. June 13, meeting of first united Parliament. Sept. 19, Death of Lord Sydenham. Oct. 7, Sir Charles Bagot governor in chief. Population of Upper Canada, 455,688; of P.E.I., 47,042.
1842. March 10, Opening of Queen's University, Kingston. Aug. 9, The Ashburton Treaty. Sept. 16, Baldwin-La Fontaine administration.
1843. Feb. 24, Sir Charles Metcalfe governor in chief. June 4, Victoria, B.C., founded. Dec. 12, Draper-Viger administration. King's (now University) College, Toronto, opened.
1844. May 10, Capital moved from Kingston to Montreal. Knox College, Toronto, founded. Population of Lower Canada, 697,084.
1845. May 28 and June 28, Great fires at Quebec. Franklin starts on his last Arctic expedition.
1846. March 16, Earl Cathcart governor in chief. May 18, Kingston incorporated. June 15, Oregon Boundary Treaty. June 18, Draper-Papineau administration. Oct. 1, The Earl of Elgin governor in chief.
1847. May 29, Sherwood-Papineau administration. Electric telegraph opened: Aug. 3, Montreal to Toronto; Oct. 2, Montreal to Quebec. Nov. 25, Montreal-Lachine railway opened.
1848. March 11, La Fontaine-Baldwin administration. May 30, Fredericton incorporated. Responsible government granted to Nova Scotia and New Brunswick.
1849. April 25, Signing of the Rebellion Losses Act, rioting in Montreal and burning of the Parliament buildings. Nov. 14, Toronto made the Capital. Vancouver Island granted to the Hudson's Bay Company. Population of Assiniboia, 5,391.
1851. April 6, Transfer of the postal system from the British to the Provincial Government; uniform rate of postage introduced. April 23, Postage stamps issued. Aug. 2, Incorporation of Trinity College, Toronto. Sept. 22, Quebec becomes the Capital. Oct. 28, Hincks-Morin administration. Responsible government granted to Prince Edward Island. Population — Upper Canada, 952,004; Lower Canada, 890,261; New Brunswick, 193,800; Nova Scotia, 276,854.
1852. July 8, Great fire at Montreal. Dec. 8, Laval University, Quebec, opened. The Grand Trunk railway chartered.
1854. June 5, Reciprocity Treaty with the United States. Sept. 11, Macnab-Morin ministry. Sept. 20, Sir Edmund W. Head

- governor in chief. Seignorial tenure in Lower Canada abolished. Secularization of the clergy reserves.
1855. Jan. 1, Incorporation of Ottawa. Jan. 27, Macnab-Taché administration. March 9, Opening of the Niagara suspension bridge. April 17, Incorporation of Charlottetown. Oct. 20, Government moved to Toronto.
1856. The Legislative Council of Canada is made elective. First meeting of the Legislature of Vancouver Island. May 24, Taché-J. A. Macdonald administration. Oct. 27, Opening of the Grand Trunk railway from Montreal to Toronto. Population of Assiniboia, 6,691.
1857. Nov. 26, J. A. Macdonald-Cartier administration. Dec. 31, Ottawa chosen by Queen Victoria as future capital of Canada.
1858. Feb., Discovery of gold in Fraser River valley. July 1, Introduction of Canadian decimal currency. Aug. 2, Brown-Dorion administration. Aug. 5, Completion of the Atlantic cable; first message sent. Aug. 6, Cartier-J. A. Macdonald administration. Aug. 20, Colony of British Columbia established. Control of Vancouver Island surrendered by the Hudson's Bay Company.
1859. Jan., Canadian silver coinage issued. Sept. 24, Government moved to Quebec.
1860. Aug. 8, The Prince of Wales (King Edward VII) arrives at Quebec. Sept. 1, Laying of the corner stone of the Parliament buildings at Ottawa by the Prince of Wales. Prince of Wales College, Charlottetown, founded.
1861. Aug. 14, Great flood at Montreal. Sept. 10, Meeting of the first Anglican provincial synod. Nov. 2, Viscount Monck governor in chief. Population—Upper Canada, 1,396,091; Lower Canada, 1,111,566; New Brunswick, 252,047; Nova Scotia, 330,857; Prince Edward Island, 80,857.
1862. May 24, Sandfield Macdonald-Sicotte administration. Aug. 2, Victoria, B.C., incorporated.
1863. May 16, Sandfield Macdonald-Dorion administration.
1864. March 30, Taché-J. A. Macdonald administration. Conferences on confederation of British North America; Sept. 1, at Charlottetown; Oct. 10-29, at Quebec. Oct. 19, Raid of American Confederates from Canada on St. Albans, Vermont.
1865. Feb. 3, The Canadian Legislature resolves on an address to the Queen praying for union of the provinces of British North America. Aug. 7, Belleau-J. A. Macdonald administration. Oct. 20, Proclamation fixing the seat of government at Ottawa.
1866. Mar. 17, Termination of the Reciprocity Treaty by the United States. May 31, Raid of Fenians from the United States into Canada; they are defeated at Ridgeway (June 2) and retreat across the border (June 3). June 8, First meeting at Ottawa of the Canadian Legislature. Nov. 17, Proclamation of the union of Vancouver Island to British Columbia.
1867. March 29, Royal assent given to the British North America Act. July 1, The Act comes into force; Union of the Provinces of Canada, Nova Scotia and New Brunswick as the Dominion of Canada; Upper and Lower Canada made separate provinces as Ontario and Quebec; Viscount Monck first governor-general, Sir John A. Macdonald premier, Nov. 6, Meeting of the first Dominion Parliament.
1868. April 7, Murder of D'Arcy McGee at Ottawa. July 31, The Rupert's Land Act authorizes the acquisition by the Dominion of the Northwest Territories. Dec. 29, Sir John Young (Lord Lisgar) governor-general.
1869. June 22, Act providing for the government of the Northwest Territories. Nov. 19, Deed of surrender to the Crown of the Hudson's Bay Company's territorial rights in the Northwest. Outbreak of the Red River Rebellion under Riel.
1870. May 12, Act to establish the province of Manitoba. July 15, Northwest Territories transferred to the Dominion and Manitoba admitted into Confederation. Sept. 24, Wolseley's expedition



- reaches Fort Garry (Winnipeg); end of the rebellion.
1871. April 2, First Dominion census (populations at this and succeeding enumerations given in tabular form on page 97). April 14, Act establishing uniform currency in the Dominion. May 8, Treaty of Washington, dealing with questions outstanding between the United Kingdom and United States. July 20, British Columbia enters Confederation.
1872. May 22, The Earl of Dufferin governor-general.
1873. March 5, Opening of the second Dominion Parliament. May 23, Act establishing the Northwest Mounted Police. July 1, Prince Edward Island enters Confederation. Nov. 7, Alexander Mackenzie premier. Nov. 8, Incorporation of Winnipeg.
1874. March 26, Opening of the third Dominion Parliament. May, Ontario Agricultural College, Guelph, opened.
1875. April 8, The Northwest Territories Act establishes a Lieutenant-Governor and Council of the Northwest Territories. June 15, Formation of the Presbyterian Church of Canada.
1876. June 1, Opening of the Royal Military College, Kingston. June 5, First sitting of the Supreme Court of Canada. July 3, Opening of the Intercolonial Railway from Quebec to Halifax.
1877. June 20, Great fire at St. John, N.B. Oct., First exportation of wheat from Manitoba to the United Kingdom. Founding of the University of Manitoba.
1878. July 1, Canada joins the International Postal Union. Oct. 5, The Marquis of Lorne governor-general. Oct. 17, Sir J. A. Macdonald premier.
1879. Feb. 13, Opening of the fourth Dominion Parliament. May 15, Adoption of a protective tariff ("The National Policy").
1880. Royal Canadian Academy of Arts founded, first meeting and exhibition, March 6. May 11, Sir A. T. Galt appointed first Canadian high commissioner in London. Sept. 1, All British possessions in North America and adjacent islands, except Newfoundland and its dependencies, annexed to Canada by Imperial Order in Council of July 31. Oct. 21, Signing of the contract for the construction of the Canadian Pacific railway.
1881. April 4, Second Dominion census. May 2, First sod turned of the Canadian Pacific railway.
1882. May 8, Provisional Districts of Assiniboia, Saskatchewan, Athabasca and Alberta formed. May 25, First meeting of the Royal Society of Canada. Aug. 23, Regina established as seat of government of Northwest Territories.
1883. Feb. 1, Opening of the fifth Dominion Parliament. Aug. 18, The Marquis of Lansdowne governor-general. Sept. 5, Formation of the Methodist Church in Canada; United Conference.
1884. May 24, Sir Charles Tupper high commissioner in London. Aug. 11, Order in Council settling the boundary of Ontario and Manitoba.
1885. March 26, Outbreak of Riel's second rebellion in the Northwest. April 24, Engagement at Fish Creek. May 2, Engagement at Cut Knife. May 12, Taking of Batoche. May 16, Surrender of Riel. Aug. 24, First census of the Northwest Territories. Nov. 16, Execution of Riel.
1886. April 6, Incorporation of Vancouver. June 7, Archbishop Taschereau of Quebec made first Canadian cardinal. June 13, Vancouver destroyed by fire. June 28, First through train on the Canadian Pacific railway from Montreal to Vancouver. July 31, First quinquennial census of Manitoba.
1887. Interprovincial Conference at Quebec. April 4, First Intercolonial Conference in London. April 13, Opening of the sixth Dominion Parliament.
1888. Feb. 15, Signing of Fishery Treaty between United Kingdom and United States at Washington. May 1, Lord Stanley governor-general. Aug., Rejection of Fishery Treaty by United States Senate.
1890. March 31, The Manitoba School Act abolishes separate schools.
1891. April 5, Third Dominion census. April 29, Opening of the seventh

- Dominion Parliament. June 6, Death of Sir J. A. Macdonald. June 15, Sir John Abbott premier.
1892. Feb. 29, Washington Treaty, providing for arbitration of the Behring Sea Seal Fisheries question. July 22, Boundary convention between Canada and the United States. Nov. 25, Sir John Thompson premier.
1893. April 4, First sitting of the Behring Sea Arbitration Court. May 22, The Earl of Aberdeen governor-general. Dec. 18, Archbishop Machray, of Rupert's Land, elected first Anglican primate of all Canada.
1894. June 28, Colonial Conference at Ottawa. Dec. 12, Death of Sir John Thompson at Windsor Castle. Dec. 21, (Sir) Mackenzie Bowell premier.
1895. Sept. 10, Opening of new Sault Ste. Marie canal. Oct. 2, Proclamation naming the Ungava, Franklin, Mackenzie and Yukon Districts of Northwest Territories.
1896. April 24, Sir Donald Smith (Lord Strathcona) high commissioner in London. April 27, Sir Charles Tupper premier. July 11, (Sir) Wilfrid Laurier premier. Aug., Gold discovered in the Klondyke. Aug. 19, Opening of the eighth Dominion Parliament.
1897. July, Third Colonial Conference in London. Dec. 17, Award of the Behring Sea Arbitration.
1898. June 13, The Yukon District established as a separate territory by Act of Parliament. July 30, The Earl of Minto governor-general. Aug. 1, The British Preferential Tariff of Canada goes into force. Aug. 23, Meeting at Quebec of the Joint High Commission for the settlement of questions between Canada and the United States. Dec. 25, British Imperial Penny (2 cent) Postage introduced.
1899. Oct. 11, Beginning of the South African War. Oct. 14, Canadian Government decides to send troops to South Africa. Oct. 29, First Canadian contingent leaves Quebec for South Africa.
1900. Feb. 27, Battle of Paardeberg. April 26, Great fire at Ottawa and Hull.
1901. Jan. 22, Death of Queen Victoria and accession of King Edward VII. Feb. 6, Opening of the ninth Dominion Parliament. April 1, Census of the British Empire, total population, 397,659,316; Canada (Fourth Dominion census), 5,371,315. Sept. 16-Oct. 21, Visit to Canada of the Duke and Duchess of Cornwall and York (King George V and Queen Mary).
1902. May 31, End of South African War, peace signed at Vereeniging. June 30, Meeting of fourth Colonial Conference in London.
1903. Jan. 24, Signing of the Alaska Boundary Convention. June 19, Incorporation of Regina. Oct. 20, Award of the Alaskan Boundary Commission.
1904. Feb. 1, Dominion Railway Commission established under the Railway Act of 1903. April 19, Great fire in Toronto. Sept. 26, Earl Grey governor-general. Oct. 8, Incorporation of Edmonton.
1905. Jan. 11, Opening of the tenth Dominion Parliament. Sept. 1, Creation of the provinces of Alberta and Saskatchewan.
1906. University of Alberta founded. Oct. 8, Interprovincial Conference at Ottawa.
1907. March 22, Industrial Disputes Investigation Act passed. April 15-May 14, Fifth Colonial Conference in London. Adjustment of Parliamentary representation in Saskatchewan and Alberta. New Customs Tariff including introduction of Intermediate Tariff. Aug. 29, Collapse of Quebec Bridge. Sept. 19, new Commercial Convention with France signed at Paris. Oct. 17, First message by wireless telegraphy between Canada and the United Kingdom. University of Saskatchewan founded.
1908. Jan. 2, Establishment of Ottawa branch of Royal Mint. April 11, Arbitration treaty between United Kingdom and United States. May 4, Ratification of Treaty for demarcation of boundary between Canada and United States. June 21-23, Bicentenary of Bishop Laval celebrated at Quebec. July 20-31, Quebec tercentenary celebrations: visit to Quebec of Prince of Wales, representing the King. Aug. 2, Great fire in Kootenay Valley, B.C. University of British Columbia founded.

1909. Jan. 11, Signing of International Boundary Waters Convention between Canada and United States. Jan. 20, opening of 11th Dominion Parliament. Jan. 27, Agreement between United Kingdom and United States to submit North Atlantic Coast Fisheries question to the Hague Tribunal. May 19, Appointment of Canadian Commission of Conservation. July 28, Conference on Imperial Defence in London.
1910. Feb. 1, Ratification of Commercial Treaty with France. Feb. 1, International Opium Commission met at Shanghai. May 4, Passing of Naval Service Bill. May 6, Death of King Edward VII and accession of King George V. June 7, Death of Goldwin Smith. Sept. 7, North Atlantic Coast Fisheries Arbitration award of the Hague Tribunal. New trade agreement made with Germany, Belgium, Holland and Italy.
1911. Jan. 21, Proposals for reciprocity with United States submitted to the Canadian Parliament. Mar. 21, Duke of Connaught appointed governor-general of Canada. May 23-June 20, Imperial Conference in London. June 1, Fifth Dominion census. July 11, Disastrous forest fires in Porcupine mining district. Sept. 21, General election of Dominion Parliament. Oct. 10 (Sir) R. L. Borden, premier. Oct. 11, Inauguration at Kitchener of Ontario Hydro-Electric Power Transmission System. Oct. 13, The Duke and Duchess of Connaught land at Quebec. Nov. 15, Opening of 12th Dominion Parliament.
1912. April 15, Loss of the steamship *Titanic*. April 15, Appointment of Dominions Royal Commission. May 15, Extension of the boundaries of Quebec, Ontario and Manitoba. June 17, Judgment delivered by the Imperial Privy Council on the marriage question raised by the *ne temere* decree.
1913. April 10, Japanese Treaty Act assented to. June 2, Trade agreement with West Indies came into force. July 26, King's Prize at Bisley won by Canadian. September 1-3, Visit to Montreal of British Lord Chancellor (Viscount Haldane). Oct. 4, New customs tariff of United States goes into force.
1914. Jan. 21, Death of Lord Strathcona and Mount Royal, aged 94. May 29, Loss of the steamship *Empress of Ireland*. Aug. 3, Acquisition by Canada of two submarines on the Pacific Coast. War with Germany, Aug. 4; with Austria-Hungary, Aug. 12; and with Turkey, Nov. 5. Aug. 18-22, special war session of Canadian Parliament. Oct 16, First Canadian contingent of over 33,000 troops land at Plymouth, Eng. Nov. 1, Loss of four Canadian midshipmen by sinking of H.M.S. *Cape of Good Hope* in action off the coast of Chile.
1915. Feb., First Canadian contingent lands in France and proceeds to Flanders. April 22, Second battle of Ypres. April 24, Battle of St. Julien. May 20-26, Battle of Festubert. June 15, Battle of Givenchy; gallantry of Canadian troops highly eulogized by F.-M. Sir John French. July 14, Sir Robert Borden attends meeting of the British Cabinet. Oct. 30, Death of Sir Charles Tupper, Bt. Nov. 22, Issue of Canadian War Loan of \$50,000,000. Nov. 30, war loan increased to \$100,000,000.
1916. Jan. 12, Order in Council authorizing increase in number of Canadian troops to 500,000. Feb. 3, Destruction of the Houses of Parliament at Ottawa by fire. April 3-20, Battle of St. Eloi. June 1, Census of prairie provinces. June 1-3, Battle of Sanctuary Wood. June 3, Order in Council establishing Board of Pension Commissioners. Sept. 1, Cornerstone of new Houses of Parliament laid by Duke of Connaught. Sept., Issue of second war loan, \$100,000,000. Oct. 16, Duke of Connaught left Canada on completion of term of office as governor-general. Nov. 11, Duke of Devonshire (appointed Aug. 19) sworn in at Halifax, N.S., as governor-general.
1917. Feb. 12-May 15, Visit to England of Prime Minister and colleagues for Imperial Conference. Feb. 21, Final Report of Dominions Royal Commission. March,

- Third war loan, \$150,000,000. March 20-May 2, Meetings in London of Imperial War Cabinet. March 21-April 27, Imperial War Conference. March 31, Canadian patriotic contributions amount to \$49,271,012. April 5, Declaration of war against Germany by United States. April 9, Capture of Vimy Ridge. April 16, Wheat placed on free list. June 11, Appointment of Board of Grain Supervisors with power to fix grain prices. June 21, Appointment of Food Controller under Order in Council of June 16. July 1, Jubilee of Confederation, 1867. Aug. 15, Battle of Loos, capture of Hill 70. Aug. 29, Passing of Military Service Act. Sept. 20, Completion of structure of Quebec bridge. Sept. 20, Parliamentary franchise extended to women: Dominion Government authorized to purchase 600,000 shares of C.N.R. Oct. 4, Battle of Passchendaele. Oct. 6, Dissolution of 12th Parliament. Nov. 12, Fourth war loan (Victory Bonds). Dec. 6, Disastrous explosion at Halifax, N.S., caused by collision between the *Imo* and the *Mont Blanc*, laden with powerful explosives. Dec. 17, General election and Union Government sustained.
1918. Feb. 23, Appointment of Canada Registration Board. Mar. 18, Opening of first session of 13th Parliament. Mar. 21, Germans launch critical offensive on west front. Mar. 30, Gen. Foch appointed generalissimo. Mar.-April, second battle of the Somme. April 17, Secret session of Parliament. May 23, Parliament prorogued. June-July, Prime Minister and colleagues attend Imperial War Conferences in London. July 18, Allies assume successful offensive on west front. Aug. 12, Battle of Amiens. Aug. 26-28, Capture of Monchy le Preux. Sept. 2-4, Breaking of Drocourt-Quéant line. Sept. 16, Austrian peace note. Sept. 19, Establishment of Khaki University of Canada. Sept. 27-29, Crossing of Canal du Nord and capture of Bourslon Wood. Sept. 30, Bulgaria surrenders and signs armistice, Oct. 1-9, Capture of Cambrai. Oct. 5, Epidemic of Spanish influenza causing closing of churches and abandonment of public meetings. Oct. 6, First German peace note. Oct. 20, Capture of Denain. Oct. 21, Appointment of Siberian Economic Commission. Oct. 25-Nov. 2, Capture of Valenciennes. Oct. 28, Issue of fifth war loan for \$300,000,000 in the form of Victory Bonds. Oct. 31, Turkey surrenders and signs armistice. Nov. 4, Austria-Hungary surrenders and signs armistice. Nov. 10, flight into Holland of German Emperor. Capture of Mons. Nov. 11, Germany surrenders and signs armistice. Spontaneous rejoicings throughout the Empire at the prospect of victorious peace. Dec. 1, National thanksgiving services for victory and peace.
1919. Feb. 17, Death of Sir Wilfrid Laurier. Feb. 20-July 7, Second session of 13th Parliament of Canada. Mar. 7, Appointment of government receiver of the Grand Trunk Pacific railway. May 1-June 15, Great strike at Winnipeg and strikes in other Western cities. May 26, Return to Canada of Prime Minister from Peace Conference. June 23, General election in Quebec, resulting in retention of Liberal administration. June 28, Signature at Versailles of Peace Treaty and Protocol; Canadian Plenipotentiaries: the Hon. Charles J. Doherty and the Hon. Arthur L. Sifton. July 24, General election in Prince Edward Island, resulting in defeat of Conservative administration. Aug. 5-7, Meeting at Ottawa of Liberal convention and election of the Hon. W. L. Mackenzie King as leader of Liberal party. Aug. 15, Arrival at St. John, N.B., of H.R.H. the Prince of Wales for official tour in Canada. Aug. 22, Formal opening of Quebec Bridge by H.R.H. the Prince of Wales. Sept. 1, H.R.H., the Prince of Wales lays foundation stone of tower of new Parliament Buildings at Ottawa. Sept. 1-Nov. 10, Third or special peace session of 13th Parliament of Canada. Sept. 15, Opening at Ottawa of the National Indus-



- trial Conference. Oct. 20, General election in Ontario, resulting in defeat of Conservative administration and formation of Ministry by E. C. Drury, United Farmers' Organization. Issue of sixth war loan for \$300,000,000 in the form of Victory Bonds. Nov. 25, H.R.H. the Prince of Wales sails from Halifax, N.S. on completion of visit to Canada. Dec. 20, Organization of "Canadian National Railways" by Order in Council.
1920. Jan. 10, Ratifications of the Treaty of Versailles having been exchanged, the war with Germany is officially declared at an end. Feb. 19, Grand Trunk shareholders ratify agreement for sale of the Grand Trunk railway to the Dominion Government. Feb. 26-July 1, Fourth session of the thirteenth Parliament of Canada. May 18, Budget speech. New taxation imposed, estimated to yield an additional \$100,000,000 of annual revenue. May 31-June 18, Trade Conference at Ottawa between Dominion and West Indian Governments. June 7-19, Convention of American Federation of Labour at Montreal. June 29, Provincial general election in Manitoba. New political groups hold balance of power, but Liberal government is retained in office. July 8, Sir Lomer Gouin is succeeded by Hon. L. A. Taschereau as Premier of Quebec. July 10, Sir Robert Borden is succeeded by Hon. (now Right Hon.) Arthur Meighen as Premier of Canada. July 16, Ratifications of the Treaty of St. Germain-en-Laye having been exchanged, the war with Austria is officially declared at an end. July 27, Provincial general election in Nova Scotia. Liberal government of Premier Murray is sustained. Aug. 5-7, Imperial Press Conference at Ottawa. Aug. 9, Ratifications of the Treaty of Neuilly-sur-Seine having been exchanged, the war with Bulgaria is officially declared at an end. Sept. 18-23, Ninth Congress of Chambers of Commerce of the Empire at Toronto. Oct. 9, Provincial general election in New Brunswick. Liberal government is sustained by a reduced majority. Oct. 20, Prohibition defeated and Government control of the liquor traffic favoured by referendum in British Columbia. Oct. 25, Referendum re complete prohibition of the liquor traffic is carried in Nova Scotia, Manitoba, Saskatchewan and Alberta. Nov. 15, First meeting of League of Nations Assembly begins at Geneva, Switzerland. Rt. Hon. Sir Geo. E. Foster, G.C.M.G., Rt. Hon. C. J. Doherty and Hon. N. W. Rowell representing Canada. M. Hyman of Belgium is elected president. Nov. 24, McGill University Centennial Endowment Fund is closed with over \$6,000,000 subscribed. Dec. 1, Provincial general election in British Columbia. Liberal government is sustained by a reduced majority.
1921. Feb. 14-June 4, Fifth Session of Thirteenth Parliament of Canada. April 18, Ontario votes for prohibition of the manufacture, importation and sale of alcoholic liquors. May 1, Government control of liquor traffic becomes effective in Quebec. May 9, Budget speech in House of Commons. Sales tax and excise duty on liquors increased. May 10, Preferential tariff arrangement with British West Indies becomes effective. June 20-August 5, Imperial Conference, at which Canada is represented by Rt. Hon. Arthur Meighen. June 9, At general election in Saskatchewan, Liberal government is sustained. July 18, At general election in Alberta, the United Farmers secure majority of seats. Sept. 5-Oct. 5, Second meeting of Assembly of League of Nations at Geneva; Canada represented by Rt. Hon. C. J. Doherty. Sept. 21, Members of reorganized Meighen Cabinet sworn in. Nov. 11, Opening of conference on limitation of armament at Washington, Sir Robt. Borden representing Canada. Dec. 6, Dominion general election. Meighen government defeated. Dec. 29, New ministry (Liberal), with Hon. (now Right Hon.) W. L. Mackenzie King as premier, is sworn in.

#### IV.—PHYSICAL CHARACTERISTICS OF CANADA.

##### GEOGRAPHICAL FEATURES.

**Situation.**—The Dominion of Canada includes the whole of the northern half of the North American continent, except the United States territory of Alaska and the Labrador coast, which is under the jurisdiction of Newfoundland. The southernmost point in the Dominion is Middle island in lake Erie, south of Pelee island, in north latitude  $41^{\circ} 41'$ ; from here Canadian territory extends northward toward the pole. In longitude the Dominion stretches from about west longitude  $57^{\circ}$ —the exact boundary with Newfoundland territory is as yet undefined—to west longitude  $141^{\circ}$ , the boundary with Alaska. Canada thus extends over about  $84^{\circ}$  of longitude and  $48^{\circ}$  of latitude.

**General Formation.**—The topographic features of the present surface of the American continent admit of its division, in Canada, into several physiographic provinces. The exposed surface of the old pre-Cambrian continent forms one of the largest divisions and has been called the Canadian Shield, the Archean Peneplain and, in its southern portion, the Laurentian highland. The mountainous country of the west constitutes the Cordilleras, while the mountains of Eastern United States, in their continuation across the border, form the Appalachian Highlands of eastern Canada. The Great Plains, with various subdivisions, occupy the area between the mountainous area of the west and the great, roughened surface of the Canadian Shield. The St. Lawrence lowland lies between the Laurentian and Appalachian highlands. Within the borders of the Canadian Shield an area on the southern margin of Hudson bay has been referred to as the Clay Belt. It occupies a part of the basin that was submerged during the glacial period and covered with a coating of clay which smoothed over its inequalities and concealed most of the underlying rocks. Since its emergence the surface has been but slightly altered by drainage channels cut across it.

**Canadian Shield.**—The portion of the pre-Cambrian continent whose exposed surface still forms a large part of Canada, has an area of about two and a half million square miles. Its northern border crosses the Arctic archipelago, the eastern lies beyond Baffin island and Labrador and reaches the depressed area occupied by the St. Lawrence river, a short spur or point crossing this valley at the outlet of lake Ontario to join the Adirondack mountains in New York. The southern boundary runs from the spur west to Georgian bay, skirts the north shore of lake Huron and sweeps almost entirely around the ancient depressed area occupied by lake Superior. The western edge, from the lake of the Woods and lake Winnipeg, bears northwest to the western end of lake Athabaska, and passes through the basins occupied by Great Slave and Great Bear lakes, reaching the Arctic ocean east of the Mackenzie River delta. In detail, the surface features of the Canadian Shield are irregular; but, viewed

broadly, it has the conformation of a great plain, depressed toward the centre and in the north and slightly elevated along the eastern and southern borders, where it presents a somewhat steep outward slope. The general elevation in the eastern portion is under 2,000 feet, and over the larger part of the plain is about 1,000 feet. The highest portion is along the northeastern margin where it presents a steep face to the sea.

**Cordilleran Region.**—The western part of the American continent is more or less mountainous. The Andean chain, which extends throughout the length of South America and broadens out in North America and in Canada, has an average width of over 500 miles. This region is the most elevated in Canada, many of the summits reaching heights of 10,000 feet, with occasional peaks over 13,000 feet above sea-level. The mountainous tract forming the Cordilleras can be divided broadly into three parallel bands; an old series of plateaus and mountains forming the central part, referred to as the Central Belt, a young series of parallel ridges, east of the central plateaus, formed of fault blocks and folds and known as the Eastern Belt and a third division, between the plateau country and the Pacific, called the Western Belt. The Belts are further subdivided as in the following summary:—

### Mountain Systems and Ranges in Western Canada.

#### EASTERN BELT.

SYSTEM.	MOUNTAINS OR PLATEAUS.	RANGE, GROUP OR PLATEAU.
ROCKIES	ROCKY MOUNTAINS	{ Hughes range, Brisco range, Livingstone range, Palliser range, other ranges and groups.
	MACKENZIE MOUNTAINS	{ Sayunei range, Tigonankweine range, other ranges and groups.
	FRANKLIN MOUNTAINS	Un-named ranges and groups.
ARCTIC	RICHARDSON MOUNTAINS	Un-named ranges and groups.

#### CENTRAL BELT.

COLUMBIA	SELKIRK MOUNTAINS	{ Purcell range, McGillivray range, Moyie range, Slocan group, Nelson range, other ranges and groups.
	MONASHEE MOUNTAINS	{ Christina range, Midway group, other ranges and groups.
	CARIBOO MOUNTAINS	Un-named ranges and groups.

CENTRAL BELT.—*Concluded*

SYSTEM.	MOUNTAINS OR PLATEAUS.	RANGE, GROUP OR PLATEAU.
INTERIOR	{ FRASER PLATEAU	{ Bonaparte plateau, Arrowstone plateau, other plateaus.
	{ NECHAKO PLATEAU	{ Ootsa-François plateau, Nadina mountain, other plateaus.
	{ UN-NAMED MOUNTAINS AND PLATEAUS	{ Un-named ranges, groups and plateaus.
CASSIAR	{ BABINE MOUNTAINS	Un-named ranges and groups.
	{ STIKINE MOUNTAINS	{ Klappan range, Groundhog range, other ranges.
	{ UN-NAMED MOUNTAINS	Un-named ranges and groups.
YUKON	{ YUKON PLATEAUS	{ Teslin range, Glenlyon range, Pelly range, un-named ranges and plateaus.
	{ UN-NAMED MOUNTAINS AND PLATEAUS	{ Un-named ranges, groups and plateaus.

## WESTERN BELT.

SYSTEM.	MOUNTAINS OR PLATEAUS.	RANGE, GROUP OR PLATEAU.
PACIFIC	{ CASCADE MOUNTAINS	Un-named ranges and groups.
	{ COAST MOUNTAINS	{ Tahtsa range, Whitesail range, Telkwa range, un-named ranges.
	{ BULKLEY MOUNTAINS	{ Zymoetz range, Seven Sisters group, Rocher Déboulé range, Hudson Bay group.
	{ UN-NAMED MOUNTAINS	Un-named ranges and groups.
INSULAR	{ VANCOUVER ISLAND MOUNTAINS	{ Un-named ranges and groups.
	{ QUEEN CHARLOTTE MOUNTAINS	
	{ ST. ELIAS MOUNTAINS (PART)	



**Mountain Peaks.**—Following is a list of the principal named peaks exceeding 12,000 feet in elevation:—

NAME.	ELEVA- TION.	LAT.	LONG.	RANGE.
<b>ALBERTA—</b>				
Alberta.....	12,000	52° 14'	117° 36'	Rocky Mtns.
Forbes.....	12,000	51° 48'	116° 56'	"
The Twins.....	12,085	52° 13'	117° 12'	"
<b>BRITISH COLUMBIA—</b>				
Robson.....	13,068	53° 07'	119° 08'	"
<b>YUKON—</b>				
Augusta.....	14,900	60° 18'	140° 28'	St. Elias Mtns.
Cook.....	13,700	60° 10'	139° 59'	"
Hubbard.....	16,400	60° 21'	139° 02'	"
King.....	16,971	60° 35'	140° 39'	"
Logan.....	19,539	60° 51'	140° 21'	"
Lucania.....	17,147	61° 01'	140° 28'	"
McArthur.....	14,253	60° 36'	140° 13'	"
Newton.....	13,860	60° 19'	140° 52'	"
St. Elias.....	18,000	60° 18'	140° 57'	"
Steele.....	16,644	61° 06'	140° 19'	"
Strickland.....	13,818	61° 14'	140° 45'	"
Vancouver.....	15,617	60° 21'	139° 42'	"
Walsh.....	14,498	61° 00'	140° 00'	"
Wood.....	15,885	61° 14'	140° 31'	"

**Appalachian Region.**—The continuation of the Green mountains of Vermont into Canada may be traced in the Notre Dame mountains, which approach the St. Lawrence below Quebec and, continuing with more easterly trend, form the highland of the Gaspé peninsula. Over a large part these hills hardly attain the dignity of mountains, but peaks rising 3,500 feet above the nearby coast are found in the Gaspé peninsula. The continuation of the White mountains of New Hampshire is found in the highlands of Maine and New Brunswick, the continuity being shown quite plainly by the rock-folding and other evidences of the great earth movements which caused the topography. An additional ridge apparently forms the present province of Nova Scotia, and although the highlands of that province in few places rise to elevations greater than 1,500 feet, the rock structure indicates that it was a mountainous country at no very remote geological period.

**Great Plains.**—A great area, including many diverse features, lies to the east of the Cordilleras. The portion that is included under the term Great Plains extends from the southwestern edge of the ancient surface forming the Canadian Shield, to the eastern edge of the mountainous region of the Cordilleras. In the belt traversed by the railway lines a three-fold division into prairie steppes, rising

one above the other, is clearly recognizable, though the divisions are not distinguishable in the region farther north to which the term prairie is not applicable. For the purpose of description these three divisions are adopted and a fourth is added for the broken hilly country of the foot-hills. The first or eastern division comprises the plain lying between the Canadian Shield and the plateau formed of Cretaceous sediments; the second extends from the edge of this plateau westward to the erosion remnants of former Tertiary deposits; and the third stretches from this line westward to the foot-hills. North of the prairie country these distinctions are less noticeable, and divisions two and three become merged into one.

**St. Lawrence Lowlands.**—The southern interior of the continent consists of a plain of low relief, bordered on the east by the Appalachian mountains, on the west by the Cordilleran mountain systems, and on the north by the old surface of the Laurentian plateau. To the northeast this plain becomes reduced in width, and in the vicinity of Quebec is represented by a narrow plateau or shelf on each side of the St. Lawrence river. The triangular area beyond, in which is the island of Anticosti, is structurally related to the central lowlands. The St. Lawrence lowlands may be divided into three sections: (1) the St. Lawrence river plain separated from (2) the Eastern Ontario basin by a point of crystalline rocks, and (3) the Ontario peninsula a slightly more elevated plain whose eastern border is a steep escarpment, the eastern outcrop of a heavy limestone bed which underlies the western peninsula.

**Waterways.**—The waterways of Canada constitute one of the most remarkable of its geographical features. East of the Rocky mountains the southern part of the Dominion slopes northeastward towards Hudson bay, and the rivers in the south flow eastward. Thus the Saskatchewan river, with its northern and southern branches, flows eastward into lake Winnipeg and thence northward by the Nelson river into Hudson bay. On the north the Great Plain has a northerly slope, and the Mackenzie river, with its tributaries, the Slave, Liard, Athabaska, and Peace rivers, flows into the Arctic ocean. The Mackenzie, exclusive of its tributaries, but including the Slave, Peace and Finlay rivers, of which it is the continuation, has a total length of 2,525 miles. The Yukon river in the Yukon territory also flows northward, passing through Alaska, into Behring strait after a course of 2,300 miles. In British Columbia, the Fraser, Columbia, Skeena and Stikine rivers flow into the Pacific ocean.

**Drainage Basins.**—The large drainage basins of Canada are the Atlantic (554,000 square miles), the Hudson bay (1,486,000 square miles), the Arctic (1,290,000 square miles), the Pacific (387,300 square miles), and the gulf of Mexico (12,365 square miles). Table 1 gives a list of the river drainage basins, and Table 2 gives the lengths of the principal rivers with their tributaries and sub-tributaries.

## 1.—Drainage Basins of Canada.

Drainage Basins.	Area Drained.	Drainage Basins.	Area Drained.
<b>Atlantic Basin.</b>	Sq. miles.	<b>Hudson Bay Basin—concluded.</b>	Sq. miles.
Hamilton.....	29,100	Kazan.....	32,700
Miramichi.....	5,400	Dubawnt.....	58,500
St. John.....	21,500	<b>Total.....</b>	<b>1,486,000</b>
St. Lawrence.....	309,500	<b>Pacific Basin.</b>	
Saguenay.....	35,900	Yukon.....	145,800
St. Maurice.....	16,200	Porcupine.....	24,600
French.....	8,000	Stewart.....	21,900
Nipigon.....	9,000	Pelly.....	21,300
Ottawa.....	56,700	Lewes.....	35,000
Lièvre.....	3,500	White.....	15,000
Gatineau.....	9,100	Alsek.....	11,200
<b>Total.....</b>	<b>554,000</b>	Taku.....	7,600
<b>Hudson Bay Basin.</b>		Stikine.....	20,300
Koksoak.....	62,400	Nass.....	7,400
George.....	20,000	Skeena.....	19,300
Big.....	26,300	Fraser.....	91,700
Eastmain.....	25,500	Thompson.....	21,800
Rupert.....	15,700	Nechako.....	15,700
Broadback.....	9,800	Blackwater.....	5,600
Nottaway.....	29,800	Quesnel.....	4,500
Moose.....	42,100	Chilcotin.....	7,500
Abitibi.....	11,300	Columbia.....	39,300
Missinaibi.....	10,600	Kootenay.....	15,500
Albany.....	59,800	Okanagan.....	6,000
Kenogami.....	20,700	Kettle.....	3,160
Attawapiskat.....	18,700	Pend d'Oreille.....	1,190
Winisk.....	24,100	<b>Total.....</b>	<b>387,300</b>
Severn.....	38,600	<b>Arctic Basin.</b>	
Hayes.....	28,000	Backs.....	47,500
Nelson.....	370,800	Coppermine.....	29,100
Winnipeg.....	44,000	Mackenzie.....	682,000
English.....	20,600	Liard.....	1,700
Red.....	63,400	Hay.....	25,700
Assiniboine.....	52,600	Peace.....	117,100
Saskatchewan.....	158,800	Athabaska.....	58,900
North Saskatchewan.....	54,700	<b>Total.....</b>	<b>1,290,000</b>
South Saskatchewan.....	65,500	<b>Gulf of Mexico Basin.....</b>	<b>12,365</b>
Red Deer.....	18,300		
Bow.....	11,100		
Belly.....	8,900		
Churchill.....	115,500		

NOTE.—Owing to overlapping, the totals of each drainage basin do not represent an addition of the drainage areas as given. Tributaries and sub-tributaries are indicated by indentation of the names.

## 2.—Lengths of Principal Rivers and Tributaries in Canada.

Names.	Miles.	Names.	Miles.
<b>Flowing into the Atlantic Ocean.</b>		<b>Flowing into the Atlantic Ocean</b>	
Hamilton (to head of Ashuanipi)..	350	—continued.	
Natashkwan.....	220	Miramichi.....	135
Romaine.....	270	St. Lawrence (to head of St. Louis)..	1,900
Moisie.....	210	Manikugan.....	310
St. Marguerite.....	130	Outarde.....	270
St. John.....	390	Bersimis.....	240
		Saguenay (to head of Peribonka)..	405

2.—Lengths of Principal Rivers and Tributaries in Canada—concluded.

Names.	Miles.	Names.	Miles.
<b>Flowing into the Atlantic Ocean.</b>		<b>Flowing into Hudson Bay—</b>	
St Lawrence (to head of St Louis)		Moose (to head of Mattagami)	
—concluded.		—concluded.	
Peribonka.....	280	Mattagami.....	275
Mistassini.....	185	Abitibi.....	340
Ashwamuchuan.....	165	Missinaibi.....	265
Chaudière.....	120	Harrikanaw.....	250
St. Maurice.....	325	Nottaway (to head of Waswanipi).	400
Mattawin.....	100	Waswanipi.....	190
St. Francis.....	165	Rupert.....	380
Richelieu.....	210	Eastmain.....	375
Ottawa.....	685	Big.....	520
North.....	70	Great Whale.....	365
Rouge.....	115	Leaf.....	295
North Nation.....	60	Koksoak (to head of Kaniapiskau).	535
Lièvre.....	205	Kaniapiskau.....	445
Gatineau.....	240	George.....	365
Coulonge.....	135		
Dumoine.....	80	<b>Flowing into the Pacific Ocean.</b>	
South Nation.....	90	Columbia (total).....	1,150
Mississippi.....	105	Columbia (in Canada).....	165
Madawaska.....	130	Kootenay.....	400
Petawawa.....	95	Fraser.....	695
Moir.....	60	Thompson (to head of North	
Trent.....	150	Thompson).....	270
Grand.....	140	North Thompson.....	185
Thames.....	135	South Thompson.....	120
French (to head of Sturgeon).....	180	Chilootin.....	145
Sturgeon.....	110	Blackwater.....	140
Spanish.....	153	Nechako.....	255
Mississagi.....	140	Stuart.....	220
Thessalon.....	40	Skeena.....	335
Nipigon (to head of Ombabika).....	130	Nass.....	205
		Stikine.....	335
		Alsek.....	260
<b>Flowing into Hudson Bay.</b>		Yukon (mouth to head of Nisutlin).....	1,765
Hayes.....	300	Yukon (Int. boundary to head of	
Nelson (to Lake Winnipeg).....	390	Nisutlin).....	655
Nelson (to head of Bow).....	1,660	Stewart.....	320
Red (to head of Lake Traverse).....	355	White.....	185
Red (to head of Sheyenne).....	545	Pelly.....	330
Assiniboine.....	450	Macmillan.....	200
Souris.....	450	Lewes.....	338
Qu'Appelle.....	270		
Winnipeg (to head of Firesteel).....	475	<b>Flowing into the Arctic Ocean.</b>	
English.....	330	Mackenzie (to head of Finlay).....	2,525
Saskatchewan (to head of Bow).....	1,205	Peel.....	365
North Saskatchewan.....	760	Arctic Red.....	230
South Saskatchewan (to head		Liard.....	550
of Bow).....	865	Fort Nelson.....	260
Bow.....	315	Athabaska.....	765
Belly.....	180	Pembina.....	210
Red Deer.....	385	Slave.....	265
Churchill.....	1,000	Peace (to head of Finlay).....	1,065
Beaver.....	305	Finlay.....	250
Kazan.....	455	Parnip.....	145
Dubawnt.....	580	Smoky.....	245
Severn.....	420	Little Smoky.....	185
Winisk.....	295	Coppermine.....	525
Attawapiskat.....	465	Backs.....	605
Albany (to head of Cat river).....	610		
Moose (to head of Mattagami).....	340		

NOTE.—In the above table the tributaries and sub-tributaries are indicated by indentation of the names. Thus the Ottawa and other rivers are shown as tributary to the St. Lawrence, and the Gatineau and other rivers as tributary to the Ottawa.



**St. Lawrence River System.**—Most important of the lakes and rivers in Canada is the chain of the Great Lakes with their connecting rivers, the St. Lawrence river and its tributaries. This chain is called the St. Lawrence River system. The Great Lakes, separating the province of Ontario from the United States and connected by a series of canals with the St. Lawrence river, allow of access from the Atlantic ocean to the interior of the Dominion at Fort William and Port Arthur, twin cities situated on lake Superior.

**The Great Lakes.**—Table 3 shows the length, breadth, area, elevation above sea-level and maximum depth of each of the Great Lakes.

3.—Area, Elevation and Depth of the Great Lakes.

Lakes.	Length.	Breadth.	Maximum Depth.	Area.	Elevation above Sea-level.
	Miles.	Miles.	Feet.	Sq. Miles.	Feet.
Superior.....	254	162	1,008	31,800	602
Michigan.....	316	118	870	22,400	581
Huron.....	207	101	802	23,200	581
St. Clair.....	26	24	21	445	575
Erie.....	239	59	180	10,000	572
Ontario.....	193	53	738	7,260	246

Lake Superior, with its area of 31,800 square miles, is the largest body of fresh water in the world. As the international boundary between Canada and the United States passes through the centre of lakes Superior, Huron, Erie and Ontario, only half of the areas of these lakes given in the above statement is Canadian. The whole of lake Michigan is within United States territory. From the western end of lake Superior to the mouth of the St. Lawrence there is, with the aid of the canal system, a continuous navigable waterway. The total length of the St. Lawrence river from the head of the St. Louis river to the Pointe-des-Monts, at the entrance of the gulf of St. Lawrence, is 1,900 miles. The tributaries of the St. Lawrence, several of which have themselves important tributaries, include the Ottawa river, 685 miles long; the St. Maurice river, 325 miles long; and the Saguenay (to head of Peribonka), 405 miles long.

**Other Inland Waters.**—In addition to the Great Lakes there are large bodies of inland water in other parts of Canada. Of these only the following principal lakes, with their respective areas, need be mentioned here: in Quebec, lake Mistassini (975 square miles); in Ontario, lake Nipigon (1,730 square miles); in Manitoba, lake Winnipeg (9,457 square miles), lake Winnipegosis (2,086 square miles) and lake Manitoba (1,817 square miles); in Saskatchewan, Reindeer lake (2,437 square miles); in Alberta, lake Athabaska (2,482 square miles). All these are within the boundaries of the provinces as at present constituted, and are exclusive of lakes situated in the Northwest Territories, as, for instance, the Great Bear lake (11,821 square miles) and the Great Slave lake (10,719 square miles) in the district of Mackenzie.

Table 4 gives a list of the principal lakes of Canada by provinces, with the area of each in square miles. The table corresponds with the delimitation of the provinces as altered by the Boundary Extension Acts, 1912 (2 Geo. V, cc. 32, 40 and 45).

#### 4. Areas of Principal Canadian Lakes by Provinces.

Names of Lakes.	Areas.	Names of Lakes.	Areas.
	Square Miles.		Square Miles.
Nova Scotia—		Quebec—concluded.	
Bras d'Or.....	230	St. Francis, river St. Lawrence, part.....	59
Little Bras d'Or.....	130	St. John.....	350
<b>Total.....</b>	<b>360</b>	St. Louis.....	56
New Brunswick—		St. Peter.....	130
Grand.....	74	Sandgirt.....	106
Quebec—		Simon.....	12
Abitibi, portion in Quebec.....	25	Timiskaming, part.....	65
Apiskigamish.....	392	Temiscouata.....	29
Ashuanipi.....	319	Thirty-one Mile.....	23
Atikonak.....	331	Two Mountains.....	63
Aylmer.....	8	Upper Seal.....	270
Baskatong.....	17	Wakonichi.....	44
Burnt.....	56	Waswanipi.....	100
Champlain, portion in Quebec.....	3	Whitefish.....	19
Chibougamau.....	138	<b>Total.....</b>	<b>11,330</b>
Clearwater.....	478	Ontario—	
Evans.....	231	Abitibi, portion in Ontario.....	331
Expanse.....	59	Bald.....	2
Gull.....	125	Balsam.....	17
Grand Victoria.....	57	Buckhorn.....	14
Great Long.....	245	Cameron.....	6
Indian House.....	306	Couchiching.....	19
Ishiamikuagan.....	87	Deer.....	7
Kakabonga.....	65	Dog.....	61
Kaniapiskau.....	441	Eagle.....	126
Kipawa.....	117	Erie, portion in Ontario.....	5,019
Lower Seal.....	220	George, portion in Ontario.....	11
Matapedia.....	16	Huron, including Georgian bay, portion in Ontario.....	14,331
Manuan.....	113	La Croix, portion in Ontario.....	23
Mattagami.....	87	Lansdowne.....	98
Megantic.....	14	Long.....	75
Melville.....	1,298	Manitou, Manitou island.....	38
Memphremagog, part in Quebec.....	28	Mille Lacs, Lac de.....	104
Menihek.....	112	Mud.....	13
Minto.....	735	Muskoka.....	54
Mishikamua.....	612	Namakan, portion in Ontario.....	19
Mishikamats.....	122	Nipigon.....	1,730
Mistassini.....	975	Nipissing.....	330
Mistassinis.....	206	Ontario, portion in Ontario.....	3,727
Nemiskau.....	56	Panache.....	35
Nichikum.....	208	Pigeon.....	15
Nomining.....	9	Rainy, portion in Ontario.....	260
Obatogamau.....	56	Rice.....	27
Olga.....	50	St. Clair, portion in Ontario.....	257
Ossokmanuan.....	131	St. Francis, river St. Lawrence, part.....	24
Papineau.....	5	St. Joseph.....	245
Patamisk.....	44	Saganaga, portion in Ontario.....	21
Payne.....	747	Sandy.....	245
Petitsikapau.....	94	Seul.....	392
Pipmaukin.....	100	Simcoe.....	271
Pletipi.....	138	Scugog.....	39
Quinze, Lac des.....	46	Stony.....	19
Richmond.....	269		
St. Francis, Beauce county.....	13		

## 4.—Areas of Principal Canadian Lakes by Provinces.—continued.

Names of Lakes.	Areas.	Names of Lakes.	Areas.
	Square Miles.		Square Miles.
Ontario—concluded.		Saskatchewan—concluded.	
Sturgeon, English river.....	106	Montreal.....	138
Sturgeon, Victoria county.....	18	Nomeau, part.....	54
Superior, portion in Ontario.....	11, 178	Plonge, Lac la.....	383
Timagami.....	90	Quill.....	163
Timiskaming, part.....	52	Red Deer on Red Deer river.....	97
Trout, English river.....	134	Reindeer, part.....	2, 302
Trout, Severn river.....	233	Ronge, Lac la.....	343
Wanapitei.....	45	White Loon.....	97
Woods, lake of the, part in Ontario.....	1, 325	Witchikan.....	70
		Wollaston.....	906
<b>Total.....</b>	<b>41, 188</b>	<b>Total.....</b>	<b>8, 329</b>
Manitoba—		Alberta—	
Atikameg.....	90	Athabaska, part.....	1, 041
Cedar.....	285	Beaver.....	89
Cormorant.....	141	Biche, Lac la.....	125
Dauphin.....	200	Buffalo.....	55
Dog.....	64	Claire.....	404
Ebb-and-flow.....	39	Lesser Slave.....	480
Etawney.....	625	Pakowki.....	72
Gods.....	319	Sullivan.....	94
Granville.....	392		
Island.....	551	<b>Total.....</b>	<b>2, 360</b>
Kiskitto.....	69	British Columbia—	
Kiskittogisu.....	122	Adams.....	52
Manitoba.....	1, 817	Atlin, part.....	331
Moose.....	552	Babine.....	306
Nomeau, part.....	12	Chiko.....	172
North Indian.....	184	Harrison.....	122
Naultin, part.....	76	Kootenay.....	220
Playgreen.....	224	Lower Arrow.....	64
Reed.....	86	Okanagan.....	135
Red Deer, west of lake Winnipegosis.....	86	Owikano.....	98
Reindeer, part.....	134	Quesnel.....	147
St. Martin.....	125	Shuswap.....	124
Setting.....	58	Stuart.....	220
Shoal.....	102	Tacla.....	135
South Indian.....	1, 531	Tagish, part.....	91
Swan.....	84	Teslin, part.....	123
Todatara, part.....	156	Upper Arrow.....	99
Waterhen.....	83		
Wekusko.....	83	<b>Total.....</b>	<b>2, 439</b>
Winnipeg.....	9, 459	Northwest Territories—	
Winnipegosis.....	2, 086	Aberdeen.....	514
Woods, lake of the, part.....	60	Aylmer.....	612
<b>Total.....</b>	<b>19, 894</b>	Baker.....	1, 029
Saskatchewan—		Clinton-Colden.....	674
Amisk.....	111	Dubawnt.....	1, 654
Athabaska, part.....	1, 801	Franklin.....	122
Buffalo.....	281	Garry.....	980
Candle.....	150	Gras, Lac de.....	674
Chaplin.....	66	Great Bear.....	11, 821
Cree.....	406	Great Slave.....	10, 719
Cumberland.....	166	Kaminuriak.....	368
Dove.....	242	Macdougall.....	318
Ile-a-la-Crosse.....	187	Maguse.....	490
Johnston.....	131	Martre, Lac la.....	1, 225
Last Mountain.....	98	Mackay.....	980
Little Quill.....	70	Naultin, part.....	230
Manitou.....	67	Nutarawit.....	343
		Pelly.....	331

4.—Areas of Principal Canadian Lakes by Provinces—concluded.

Names of Lakes.	Areas.	Names of Lakes.	Areas.
	Square Miles.		Square Miles.
Northwest Territories—concluded.		Yukon—concluded.	
Schultz.....	123	Kusawa.....	56
Thoalintoa.....	184	Laberge.....	87
Todatara, part.....	52	Marsh.....	32
Yathkyed.....	858	Tagish, part.....	18
		Teslin, part.....	123
<b>Total.....</b>	<b>34,391</b>	<b>Total.....</b>	<b>649</b>
Yukon—		<b>Canada.....</b>	<b>120,924</b>
Aishihik.....	107		
Atlin, part.....	12		
Kluane.....	184		

**Islands.**—The northern and western coasts of Canada are skirted by clusters of islands. Those on the north are mostly within the Arctic circle. On the west, Vancouver and Queen Charlotte Islands are the largest and most important. On the east, besides the separate island colony of Newfoundland, there are Cape Breton Island, forming part of the province of Nova Scotia, Prince Edward Island, forming one of the nine provinces of Canada, the Magdalen Islands and the island of Anticosti. To the south of Newfoundland are the two small islands of St. Pierre and Miquelon belonging to France. In lake Huron is the island of Manitoulin and the so-called Thirty Thousand Islands of Georgian Bay. In the St. Lawrence river, just below lake Ontario, are the picturesque Thousand Islands.

**GEOLOGY AND ECONOMIC MINERALS.**

By R. W. BROCK, M.A., LL.D., F.G.S., Dean, Faculty of Applied Science,  
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**Geological Investigations.**—The geological investigation of Canada may be said to have commenced in 1843 with the organization of the Geological Survey of Canada under Sir William Logan. The classical work of Logan and his little coterie of assistants, Murray, Hunt, Billings, and others, was summarized in the *Geology of Canada*, published in 1863, which deals with the southern portions of Ontario and Quebec. Since this was written, the work of the Geological Survey has gradually widened until at present it embraces the northern half of the continent of North America. Much of this work has been exploratory. The great field to be covered with a small force has prevented concentration of effort, and in no single district can it be claimed that the geological problems are completely solved. The natural difficulties of travel in the northland have rendered the progress of even reconnaissance work tedious, and a large part of Canada is still practically unexplored. Nevertheless sufficient has been done to make known its main geological features, to indicate roughly the territories that will be found to be mineral bearing, to presage the character of its mineral resources in the different geological provinces and to demonstrate that Canada is destined to become one of the great mining countries of the world.



A brief summary of the characteristics of the main natural divisions of the country will at least suggest the possibilities of great expansion in the mineral development of the country.

**Appalachian Region.**—The southeastern portion of Quebec, together with the Maritime provinces, forms the northeastern extension of the Appalachian Mountain system. The Appalachian region is characterized by rock formations, ranging from pre-Cambrian to Carboniferous, that are typically disturbed and thrown into a succession of folds. In Canada the Appalachian extension is found to possess many of the minerals which have placed some of the eastern States in the foremost rank of mineral and industrial districts of the world. Important deposits of coal, iron, and gold are mined in Nova Scotia. Of lesser but still considerable importance, are the gypsum, stone and building material industries; manganese, antimony, tripolite and barite are also mined, and some attention has been paid to copper. The principal minerals of New Brunswick are gypsum, iron, coal, stone for building purposes and grindstones, clays, antimony, manganese, mineral water and oil-bearing shales. Natural gas is also an important product. The chief asbestos mines of the world are situated in southeastern Quebec, and there are important deposits of chrome iron ore, copper and pyrite. Iron ores and gold also occur.

**Lowlands of the St. Lawrence Valley.**—The southern portion of Ontario and the valley of the St. Lawrence are very similar geologically to the state of New York, and consist mainly of flat-lying Palæozoic rocks. The mineral products are the same, viz., clay, cement and other building materials, petroleum, natural gas, salt, gypsum and other non-metallic minerals.

**Laurentian Plateau.**—North of the valley of the St. Lawrence, from Newfoundland to beyond the lake of the Woods, and enclosing Hudson bay like a huge V, is an area of pre-Cambrian rocks, estimated to cover 2,000,000 square miles, or over one-half of Canada. Over the greater portion reconnaissance surveys only have been made, and the southern fringe of it alone may be said to be known, and of this fringe only a portion has been prospected. These rocks of the pre-Cambrian are remarkable for the variety of useful and valuable minerals they contain. Iron, copper, nickel, cobalt, silver, gold, platinum, lead, zinc, arsenic, pyrite, mica, apatite, graphite, feldspar, quartz, corundum, talc, actinolite, the rare earths, ornamental stones and gems, building materials, etc., are all found, and are, or have been profitably mined. Most of the other minerals, both common and rare, that are used in the arts have been found. Diamonds have not been located, but from their discovery in glacial drift from this area it is altogether probable that they occur.

A tongue of these pre-Cambrian rocks extends into New York state, which supports some large and varied mineral industries. Another extension crosses over from Canada into Michigan, Wisconsin, and Minnesota. In it are located the Michigan copper mines and the

great Lake Superior iron ranges. Along the southern edge of the pre-Cambrian in Canada, the only portion that has yet received any prospecting, there are already known copper and gold deposits in Saskatchewan and Manitoba, the gold ranges of the lake of the Woods, the silver of Thunder bay, a succession of iron ranges extending from Minnesota for hundreds of miles to Quebec, copper rocks of Michipicoten and Bruce mines, the Sudbury copper-nickel deposits (probably the largest high grade ore bodies in the world), the Montreal river and Cobalt silver areas, the world-famous Porcupine and other gold deposits, the corundum deposits of eastern Ontario, the magnetites of eastern Ontario and Quebec and their large apatite-mica deposits. In the far north about Coronation gulf, are rocks that will warrant prospecting, since they bear native copper very similar to the great Michigan occurrences.

**Interior Plain.**—The greater portions of Manitoba and Saskatchewan, that lie outside of the pre-Cambrian, and the province of Alberta, are pre-eminently agricultural; but in addition to furnishing an important market for the product of the mines they will have a large output of non-metallic minerals. The Interior plain is underlain for the most part by sedimentary rocks, chiefly of Cretaceous age, containing coal, building stones, clays, some of them high grade, and cement materials. Natural gas over wide areas and under great pressure has been tapped, and there is every indication of a large oil field in the northern portion, at least, of Alberta, and some oil has been encountered in the southwest. The lower sandstones of the Cretaceous along the Athabaska river, where they come to the surface, are for miles saturated with bitumen. These tar sands will probably average 12 per cent in maltha or asphaltum. Recent prospecting has discovered oil at Pouce Coupé on the Peace river, and at Fort Norman, on the Mackenzie river, near the Arctic circle. At other points in the Devonian rocks of the Mackenzie basin oil indications occur. The lignites of the eastern plains are useful for local purposes, and highly bituminized coals are found as the mountains are approached. Vast areas are underlain by lignite beds in Saskatchewan and Alberta, and the reserves of bituminous coal in Alberta are enormous. Gold is found in a number of the rivers coming from the mountains. Clay ironstone occurs in many parts of the northwest, and will in time be utilized. Salt and gypsum also occur.

**Cordilleran Belt.**—The Cordilleran belt in South America, in Mexico, and in the Western States, is recognized as one of the greatest mining regions of the world, noted principally for its wealth in gold, silver, copper and lead. The Cordilleras stand unparalleled in the world for the continuity, extent and variety of their mineral resources. In Canada and in Alaska this belt maintains its reputation, although in both, for the greater part, it is unprospected. In Canada the belt has a length of 1,300 miles and a width of 400 miles. It is pre-eminently a great mining region. Its rocks range from the oldest formations to the youngest; vulcanism and mountain building processes have repeatedly been active.

While a number of mining camps have been developed near the International boundary line (Sullivan, Slocan, Rossland, Boundary, Copper Mt.) and along the Pacific coast (Britannia, Surf Inlet, Anyox, Stewart), and while some of the main streams have been prospected for placer gold, the greater part of the Cordilleran belt in Canada is as yet untouched. Probably not one-fifth can be said to have been prospected at all, not one-twentieth prospected in detail, and not one area however small, completely tested. The chief products of the lode mines of the Cordilleran belt in Canada are copper, gold, silver, lead and zinc. Yukon is noted for its production of placer gold and is now attracting attention with rich silver ores. In addition to these minerals there are, in this portion of the country, enormous resources of coal of excellent quality, varying from lignite to anthracite, and conveniently distributed. Only the coal areas of the southern part of the province and a few small areas on the Telkwa, Skeena and Nass rivers and on the Yukon have as yet been examined.

Great unprospected areas are known to contain, in places, coal formations, and will no doubt when explored add greatly to the present known reserves. The coal production is not large as compared with the supply; but a large increase in production may be expected in the near future, as these are the best steaming and coking coals in the west.

Upon the knowledge already gleaned concerning the economic deposits of the Dominion by geological exploration, by prospecting and by actual mining, it is safe to predict that the mineral industry will become a very great and valuable one. Its development will render essential a close study of the geology of the country. The geological field in Canada is as rich and inviting as the mining. Perhaps half the rock history of the world is written in the pre-Cambrian, and it is of this portion that most remains to be deciphered. Since the greatest spread of these old rocks occurs in Canada, much of this work will fall to Canadian geologists, and the careful solution of the problems presented will be as valuable to science as to the mining industry.

#### **GEOLOGY IN RELATION TO AGRICULTURE IN CANADA.**

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The agricultural possibilities of any country are dependent upon the character of the soil and on the physiographic features. Both of these are closely related to the geology and geological history of the country.

**Soils.**—Soil, strictly speaking, consists of but a thin surface layer of loose material containing humus, derived from the decomposition of organic matter and other compounds suitable for plant growth. The great proportion of both the soil and the subsoil consists of mineral matter. From the mineral constituents are derived potash and phosphoric acid, two of the chief compounds essential to the growth of vegetation. The mineral constituents are derived from



rocks that through various processes have been decomposed into incoherent particles. Soils may be wholly residual, that is, they may consist of material derived from the decay of immediately underlying rocks; or they may consist of transported material or of a mixture of residual and transported material.

The level, hilly or mountainous character of the country is dependent on the nature of the rocks and on the processes of uplift, folding and erosion to which they have been subjected. Sedimentary rocks like sandstones and shales yield readily to the action of such destructive agents as variations of temperature, frost, rain, wind, running water and ice, and of chemical processes such as oxidation, hydration and carbonation. The harder rocks, on the other hand, such as quartzites, slates and granites, are more resistant; mountains composed of these are therefore more slowly subdued than are those composed of sandstones and shales.

**Agricultural Regions.**—The portion of Canada, the climatic conditions of which are favourable to agriculture, may be divided into five great regions:

1. The Laurentian plateau, consisting of the vast upland surrounding Hudson bay and underlain chiefly by igneous rocks, such as granite, together with a less amount of hardened sediments.

2. The Appalachian region, occupying the Maritime Provinces and eastern Quebec and underlain by folded sediments and igneous rocks.

3. The St. Lawrence lowlands of southern Quebec and southern Ontario, underlain by nearly horizontal sediments.

4. The Plain region of Manitoba, Saskatchewan and Alberta, underlain by flat-lying sediments.

5. The Cordilleran region, the mountainous region extending from the Rocky mountains to the Pacific coast and underlain by folded sediments and igneous rocks.

These five regions have all been exposed to weathering for a long time. The Laurentian plateau is the oldest land area of any great extent in Canada.

During the long ages that this Laurentian continent has been exposed, the area to the southeast, south and west has been submerged for long periods beneath the sea, and great thicknesses of sandstones, shales, and limestones have been laid down. These sediments have been elevated subsequently above sea level, certain sections such as southwestern Quebec, southern Ontario and the plains of Manitoba, Saskatchewan and Alberta rising so gently as to produce little disturbance of the rock strata; while in eastern Quebec, New Brunswick, Nova Scotia and British Columbia the strata have been folded and crushed into mountain ranges and intruded by igneous rocks.

The soils derived from these rocks by long subjection to decomposing agencies were greatly disturbed in recent times by glaciation. Nearly the whole of Canada was covered by ice, which in the southern



part of the country had a general southerly movement. The result of the glaciation was that great stretches of country were denuded of soil, and other areas received accessions of a great quantity of transported material. Towards the close of the glacial period the outlets of many depressions were closed by lobes of the retreating glaciers and became filled with water. These lakes formed areas for the deposition of fine sediments, such as clay and silt, and on the final melting of the glaciers large stretches of level fertile land remained.

**Laurentian Plateau.**—The most extensive physiographic unit of Canada is the subdued Laurentian plateau. This is a gently sloping plateau of rather even surface, comparatively low and seldom rising 2,000 feet above the sea. The hills breaking the even surface rise but a few hundred feet at most above the general level.

It is a great U-shaped area surrounding Hudson bay and extends from the Atlantic ocean, on the Labrador coast, west to a line running northwest through lake Winnipeg, lake Athabaska, Great Slave lake and Great Bear lake. It extends south to lake Huron and lake Superior, and occupies nearly all the provinces of Ontario and Quebec, except the area southwest of a line running from Kingston to Georgian bay, that part of eastern Ontario forming the angle between the Ottawa and St. Lawrence rivers, and that part of Quebec south of St. Lawrence river.

This plateau is underlain by hardened sediments and igneous rocks. The latter are much more widespread than the former, and granitic types predominate. The rocks of this region are among the oldest rocks of which geologists have any knowledge. They are very resistant, and although they have been exposed to weathering since very early in the earth's history the inequalities in the surface features have not been wholly reduced. These inequalities have been augmented by glacial action. A further effect of glaciation was the denuding of much of this region of its soil. Generally speaking, therefore, the physiographic and soil conditions are not favourable to agricultural pursuits. Over a great part of the area, however, sufficient soil has been retained to support a forest growth, although insufficient for agriculture, and it is to be regretted that large stretches of such land have been depleted of their forests and have become dreary, barren wastes.

Within the plateau there are valleys where areas of softer rock have afforded a greater abundance of soil that has not been removed by glaciation, and beautiful cultivated fields lend a pleasing contrast to the surrounding forest. In places the sediments deposited in the basins of glacial lakes have reduced the inequalities of the surface and produced large level areas of arable land. Interesting examples of these are furnished by the Clay Belt of northern Ontario and Quebec, traversed by the Grand Trunk Pacific railway, and by the flat section of country along the main line of the Canadian Pacific railway a few miles north of Sudbury.

**Appalachian Region.**—The Appalachian region occupies the hilly part of southeastern Quebec and the Maritime Provinces. Here during remote geological ages the sedimentary beds of limestone, sandstone and shale that had been deposited beneath the sea were folded into mountain ranges, and were much altered and hardened and intruded by igneous rocks. During long succeeding ages these mountains have been subdued, and little is left that may be regarded as mountains except the Notre Dame range of Quebec with a general elevation of 1,000 to 2,000 feet and with peaks rising above 3,500 feet, the broken hilly country of the northwestern part of New Brunswick, a section of this province bordering the bay of Fundy, and a central ridge in Nova Scotia.

In the ordinary processes of erosion much of the loosened material resulting from rock decay was carried seaward, and in recent times glaciation denuded a great deal of the more elevated sections of country, leaving barely enough soil to support a forest growth.

In some places sediments have been deposited subsequently to the great folding processes of earlier ages; they are unaltered, easily attacked by weathering agencies and are overlain by an ample depth of soil. The soils of Prince Edward Island, the Annapolis-Cornwallis valley and other sections are derived from these sandstones and shales of later deposition, the shales producing the clayey constituents and the sandstones yielding the sand that renders the soil porous and tillable. Calcareous slates have in places, such as in Carleton and York counties, New Brunswick, broken down into fertile soils. In eastern Quebec sufficient soil has been retained in the valleys to render the land arable.

The great fertility of the reclaimed marshes of Nova Scotia and New Brunswick is due to the fine silt deposited by the tides by which they were formerly submerged.

**St. Lawrence Lowlands.**—The St. Lawrence lowlands consist of the generally level, arable land south of the Laurentian plateau. This lies on both sides of the St. Lawrence above Quebec, reaching south to the international boundary, occupies the eastern part of Ontario, east of a line running southward from a point about 50 miles west of Ottawa, and forms that portion of Ontario lying southwest of a line extending from Kingston to Georgian bay.

These lowlands are among the most fertile of Canada's agricultural sections. They are underlain by flat-lying shales and limestones which yield readily to weathering. The physiographic features are favourable, and the residual material derived from the decomposition of limestones and shales results in a fertile, calcareous, clayey soil. The loose surface deposits are of great depth, in places exceeding 200 feet.

The lowlands were overridden by the great glacier. This glaciation, however, had apparently slight denuding effect on this part of the country, but served to mix the loose materials resulting from the weathering of the shales and limestones, and contributed the potash-bearing ingredients transported from the granitic areas of the Laurentian plateau.

In some sections, as in the vicinity of the Great Lakes, sedimentation took place in large lakes produced by the blocking of the outlets of the present lake basins by lobes of the retreating glacier. Recent sedimentation took place also over southwestern Quebec and eastern Ontario during submergence beneath the sea about the close of the glacial period.

**Plain Region.**—The plains of Manitoba, Saskatchewan and Alberta are underlain by nearly flat-lying shales and sandstones. These have weathered down into the clays and clay loams that have made the plains one of the great wheat-producing districts of the world. This part of Canada was also subjected to glaciation, but the great proportion of the surface deposits is derived from the underlying rocks.

Some large stretches of the Plains region were submerged by glacial lakes in which fine silts and clays carried down from the surrounding land and introduced by glacial streams were deposited. Such is the very fertile Red River valley. This is a part of the bed of a great lake that extended from the Laurentian plateau west to the Manitoba escarpment; it reached southward into the United States and northward 100 miles beyond lake Winnipeg.

The great fertility of the prairie provinces is due in part to the mineral constituents of the soil and in part to the great accumulation of nitrogenous organic matter, the remains of ages of vegetable growth.

**Cordilleran Region.**—The Cordilleran region, extending from the Rocky mountains to the Pacific ocean, is underlain by igneous rocks of various kinds and by sediments that have been folded into mountain ranges and much altered. The whole region remains mountainous, though the interior section is reduced to an elevated plateau. Agricultural pursuits are therefore limited to the valleys. In these there are numerous terraces composed of silt carried down by streams issuing from former glaciers, the latter acting as eroding agents on the underlying rocks. These valley deposits are fertile and are well adapted to fruit culture. The soil of the lower Fraser is a heavier soil and consists chiefly of alluvium.

Thus is Canada's rich heritage in green forests and broad waving fields of grain the result of the geological processes of ages. Nature in her sterner moods produced those great upheavals, foldings and crushings of the earth's crust that resulted in the rugged and uneven stretches of country suited to the growth of forests; in her kindlier moments she slowly and gently and with little disturbance elevated above the sea the level or slightly undulating areas so well adapted to agriculture. Ages before man appeared upon the earth had the geological processes already determined what his pursuits should be and where they should be carried on.







Victoria Memorial Museum

1 - Arctic province  
2 - Arctic province  
3 - Hardwood Forest province

4 - Carolinian province  
5 - Prairie province  
6 - 1st Prairie steppe  
7 - 2nd " "  
8 - 3rd " "

9 - Rocky Mountains province  
10 - Selkirk Mountains province  
11 - Coast Mountains province  
12 - Dry Belts province

THE FLORA OF CANADA.<sup>1</sup>

By M. O. MALTE, Ph.D., Chief Botanist, National Herbarium, Department of Mines, Ottawa.

## INTRODUCTION.

It is a well known fact that, at a geologically recent period, practically the whole of Canada from the Rocky mountains east was covered with glacial ice which, slowly advancing southward, reached as far as central Missouri in the United States. Whatever vegetation may have flourished in Canada before the glacial period was gradually forced to migrate southward as the ice advanced. During this retreat many species were no doubt wiped out of existence, but a certain number, belonging perhaps largely to types which now are found in the arctic regions, managed to survive. In fact, we must surmise that, during the glacial period, the vegetation immediately in front of the continental ice was arctic in character and that, when the glaciation reached its maximum, those parts of the United States which were immediately to the south of the ice had a flora similar to that now existing in the far north.

With the return of a warmer climate and the gradual recession of the continental ice, vegetation began to move back northward, with the Arctic types as a vanguard followed by more temperate and southern ones. Generally speaking, the Canadian flora, as it exists today, may therefore be said to be composed of immigrants that took possession of the country after the glacial period and established themselves in botanical provinces in accordance with their specific requirements. These botanical provinces, generally referred to as zones, will be briefly described in the following pages. For the boundaries of the various zones, see the accompanying map.

**The Arctic Zone.**—Botanically, the arctic zone is the region lying north of the tree line. In Canada it extends far to the south of the arctic circle, especially in the eastern parts of the Dominion. Its southern limit is, roughly, a line running from the estuary of Mackenzie river to the mouth of Churchill river on the west coast of Hudson bay. East of Hudson bay, the tree line, i.e., the southern boundary of the arctic zone, runs from about lat. 56° on Richmond gulf to the mouth of George river on the eastern shore of Ungava bay, and from there in a southeasterly direction along the coast of Labrador to Hamilton inlet. South of Hamilton inlet a narrow strip along the coast as far south as the strait of Belle Isle and extending a short distance to the west from there is also barren of real trees and therefore has an arctic aspect. This strip can hardly be included in the arctic zone proper, however, although a few arctic plants may be found there; the lack of trees and the barren appearance in general are caused by the arctic current which flows from the north along the coast and through the strait of Belle Isle.

<sup>1</sup>This article is a revised and popularized edition of a paper, entitled "Flora of Canada," by the late Mr. J. M. Macoun, C.M.G., F.L.S., and the writer, published in *Canada Year Book*, 1915, and also as *Museum Bulletin No. 26*, Geological Survey, Department of Mines, Ottawa, 1917.

The vegetation in the arctic zone is, generally speaking, of a low-growing and even dwarfed type. As mentioned above, the arctic zone has no real trees. The woody plants, even when half a century old or more, reach a very inconspicuous height in comparison with their next of kin farther south and are often prostrate or even trailing along the ground. In the more northern parts of the arctic zone the most conspicuous woody plants are willows and dwarf birches. Farther south, on the tundra, i.e., the more or less boggy lowlands north of the tree line, the woody plants are chiefly represented by members of the blueberry family.

In respect to herbaceous vegetation, the arctic flora of Canada is very closely related to the so-called circumpolar flora in general. Not only are there many species in arctic Canada which occur all around the north pole, but in general characteristics the Canadian arctic plants are very similar to arctic plants elsewhere, and particularly to those growing in Greenland and arctic Europe.

A striking form of growth encountered in many species is the dense, compact, bunchy type, which especially is found well developed on rocky ground in the northern sections of the arctic zone. This form of growth, as is well known, is characteristic also of arid and semi-arid regions in hot climates, and at first sight it may seem strange that it should also be found in the arctic. The arctic zone, however, from a plant physiological point of view, is somewhat akin to arid regions farther south. In the latter regions the bunch growth is generally considered to be associated with a shortage of water supply in the ground, and so it may also be considered in the arctic, to some extent at least. For, even if the ground may apparently be well supplied with moisture, the plants relying upon the moisture are often unable to utilize it on account of the temperature in the ground being at times so low that the water-absorbing parts of the plants are incapable of functioning.

Compactness of growth is also displayed by a number of plants which, although not growing in defined bunches, form dense and often rather extended mats. On the other hand, however, there are quite a number of species which grow neither in bunches nor in mats; these are common especially on the tundra.

Practically all arctic plants are perennials. Owing to the shortness of the season they are often caught by early frost before they have ripened their fruit and when still developing blossoms. Indeed, many species enter the winter regularly in this condition and hibernate with flower and leaf buds in an advanced stage of development. When the returning sun again wakes them up to renewed activity, they are therefore ready to spring into blossom over-night, as it were, and to present a surprisingly rapid development of vegetative as well as of floral organs.

**The Sub-arctic Forest Zone.**—The sub-arctic or so-called coniferous forest extends, in the east, from the arctic zone southward to a line running approximately from Anticosti to the south end of lake Winnipeg. This line is practically identical with the northern



limits of the white and the red pine. West of lake Winnipeg the sub-arctic forest is bounded to the south and west by the prairies and the foothills of the Rocky mountains, respectively. The Gaspé peninsula and sections of New Brunswick may also be included in the sub-arctic forest zone.

The sub-arctic forest, as the name indicates, is decidedly boreal. The trees do not reach any imposing height and the number of species which make up the forest is small in comparison with the number occurring in the hardwood forest zone to the south. The sub-arctic forest is largely coniferous in character, the black and white spruce being the dominating trees. Of the other coniferous trees the Bankian pine is the most important species. It reaches perfection in the western part of the zone and constitutes the chief source of supply of lumber for the northern prairie region. The other trees characteristic of the zone in general are aspen and balsam poplar, white birch, larch, and balsam fir. Between the gulf of St. Lawrence and lake Winnipeg, white cedar, white elm, and ash are occasionally met with, but these trees can not be considered to belong to the sub-arctic forest proper.

Perhaps the most striking characteristic of the sub-arctic forest is the abundance of berry shrubs; as examples may be mentioned gooseberries, currants, blueberries, raspberries, yellow-berries, and high-bush cranberries. Another striking feature in the complexion of the sub-arctic forest is the remarkable uniformity, in general character as well as in species, exhibited throughout the zone. This lack of variety is especially striking in the vegetation of the bogs, which are very numerous throughout the zone, the species encountered in the bogs of any one part of the zone being characteristic of practically the whole sub-arctic forest.

On the whole, the herbaceous flora of the sub-arctic forest is remarkably uniform throughout, and hardly a species is found that does not occur either in the arctic zone or in the hardwood forest zone to the south. A noteworthy exception to this rule is a small water lily, in fact the smallest of the water lilies, which is found in the sub-arctic forest zone only.

The sub-arctic forest zone is as yet almost undisturbed by settlers except in some sections of the eastern provinces, for instance in parts of the so-called clay belts of northern Quebec and Ontario. It forms a vast reserve of national wealth and may in the future, subject to judicious management, furnish the chief supply of wood for the pulp and paper industries in eastern North America.

**The Hardwood Forest Zone.**—The hardwood forest zone includes all eastern Canada south of the sub-arctic forest, with the exception of a small region in southern Ontario which extends between the shore of lake Erie and a line running approximately from Toronto to Windsor.

The hardwood forest zone is characterized chiefly by deciduous trees, the principal ones being basswood, sugar maple, red maple, black ash, white ash, white elm, yellow birch, red oak, burr oak, and



beech. Of the coniferous trees white pine, red pine, hemlock, and white cedar are the most important. The underbrush, although very variable and made up of a great number of species, is generally rather scanty and becomes conspicuous, as a component of the forest, only along the borders of the woods or where the woods are open. Among the most typical shrubs may be mentioned service berry, moosewood, purple flowering raspberry, sumach, poison ivy, and arrow-woods.

As the rainfall is abundant throughout the hardwood forest zone, the herbaceous vegetation is rich, in species as well as in individuals, everywhere where light and soil conditions are favourable. In the woods proper it is rather insignificant after the foliage of the trees is fully developed. In the spring, however, it is very luxuriant and, especially where the soil is rich and deep, there is a magnificent display of beautifully coloured and showy flowers, for instance trillium, bellwort, dog's-tooth violet, showy orchis, jack-in-the-pulpit, spring beauty, violets (blue, yellow and white forms), hepatica, dutchman's breeches, squirrel corn, bloodroot, pepper-root, barren strawberry, flowering wintergreen, blue phlox, etc. Others, less conspicuous but characteristic of the hardwood forest's spring flora, are species of sedges, wild ginger, blue cohosh, mitrewort, star flower, showy lady's slipper, etc.

During the summer the herbaceous vegetation is chiefly confined to the borders of the woods, clearings, and other places where the growth is not suppressed or kept back on account of too much shade. Characteristic of the bogs are, among others, various species of orchids and the pitcher-plant.

The autumn flowers are chiefly members of the composite family, with asters, golden rods, and joe-pye in greatest profusion.

Very characteristic of the hardwood forest zone is the autumnal colouring of the leaves of trees, shrubs, and herbaceous plants. This autumnal colouring lasts a comparatively long time, from about the first week of September to the second week in October, dependent on the dryness of the season. During that period a splendid display of colours is exhibited, especially in open, mixed woods where the underbrush is well developed. Shades of yellow, golden bronze, red and scarlet are mixed in a gorgeous symphony of colours, generally modulated most marvellously by the sombre, deep, dark or bluish green of the conifers which are dotted among the deciduous trees. No such wealth of autumnal colour is met with in any of the other zones.

**The Carolinian Zone.**—This zone is confined to a small tract of land in southern Ontario, bounded to the south by lake Erie and to the north by a line running approximately from the northern shore of lake Ontario to Windsor. Its flora is most typically developed on the Niagara peninsula and on the shore of lake Erie. In general physiognomy it is rather similar to the hardwood forest flora just described, but it differs greatly as far as characteristic species, and even genera, are concerned. It is decidedly southern as to species, and exhibits a large number of plants, woody as well as herbaceous, which occur nowhere else in Canada.

The most characteristic trees are the hickories (six species), the oaks (ten species), the black walnut, the chestnut, and the sycamore. Less abundant and more local in their distribution are the cucumber tree, the tulip tree, the flowering dogwood, which all have beautiful and very conspicuous flowers, the papaw, the red mulberry, the American crabapple, the sour gum, the sassafras, and others.

The herbaceous vegetation is very rich and at least a hundred species which occur nowhere else in Canada are found in the zone. A few of the most conspicuous ones may be mentioned, viz: yellow nelumbo or lotus flower, may apple, wild lupine, tick trefoil, flowering spurge, swamp rose mallow, wild pansy, prickly pear, poke milkweed, wild potato vine, downy phlox, water-leaf, bee balm, fox-glove, tall bell flower, great lobelia, ironweed, dense button snakeroot, prairie dock, cup plant, sunflowers, tall coreopsis, Indian plantain, showy lady's slipper, etc.

Golden seal and ginseng were at one time abundant but are now practically extinct. Indeed a similar fate is also threatening many of the other species characteristic of the zone, the reason generally being clearing of the land for agricultural purposes.

**The Prairie.**—Under the general term prairie is understood the vast grass-covered area of the provinces of Manitoba, Saskatchewan, and Alberta. It is bounded to the east and north by the sub-arctic forest and to the west by the foothills of the Rocky mountains.

The prairie, which begins a few miles east of Winnipeg, has been subdivided into three zones, known as the first, second and third "prairie steppe." These zones are rather indefinite, botanically speaking, and they have one thing in common as far as the vegetation is concerned. The luxuriance and general appearance of their flora are to a conspicuous degree dependent on the rain and snowfall. In case of the spring vegetation, the rainfall during the previous year and the snowfall during the preceding winter are dominant factors, so much so that, in the event of lack of sufficient precipitation, the spring flora may in certain years be either very poorly represented or even almost entirely absent. The summer and fall vegetation are to an equal extent dependent on the present season's precipitation and thus it may happen that a district which one year displays a luxuriant growth, rich in species and individuals, may a following year appear almost barren of flowering plants. Lack of precipitation is also largely responsible for the fact that in some seasons the grass vegetation, so characteristic to the prairie, may remain practically at a standstill without heads or seeds being formed.

**First Prairie Steppe.**—This, as defined by the late Professor John Macoun, includes "the low plain of Manitoba, bounded by a line of elevated country, which commences at the international boundary at a point some distance west of Emerson, and extends northwestwardly under the names of Pembina, Riding, Duck, Porcupine and Pas mountains."

The southeastern part of the area so defined differs from the true prairie in that it is characterized by many woodland plants which have

their home east of the Great Lakes but which occur rarely, if at all, between lake Huron and the Manitoba border. Among these plants may be mentioned nettle tree, basswood, wild plum, hawthorn, Virginia creeper, moonseed, bloodroot, columbine, hog peanut, tick trefoil, prickly cucumber, species of gentian, lousewort, Indian paint-brush, ox-eye, cone-flower, etc.

The prairie proper of the first prairie steppe is confined chiefly to what is known as the Red River valley, i.e., the low, flat plains south and west of Winnipeg. In this region trees are met with only in narrow fringes along the rivers, oak, elm, poplars, and Manitoba maple being the most abundant. Away from the borders of streams the prairie is treeless. It is covered with an abundance of herbaceous plants, the most widely represented families being the composite family (asters, golden rods, etc.), the rose family, the pea family, the grass family, and the sedge family, but the species representing them can hardly be said to be characteristic of the zone, as practically all of them are found in suitable localities farther west.

*Second Prairie Steppe.*—This extends westward to a line running approximately from the international boundary at longitude 103° 30' in a northwesterly direction to Battleford.

The flora is rather diversified and several very different plant associations are met with. In the north, where the prairie and the sub-arctic forest meet, the flora is composed of species characteristic of both zones, as is also the flora of the northern parts of the third prairie steppe. In the southwestern part of the second prairie steppe, i.e., the country southwest of Moose mountain, in Saskatchewan, the vegetation is in many respects similar to that of the drier sections of the third prairie steppe. The grass is very short and the vegetation in general of a type adapted to regions with a scant precipitation. In places, large sandy tracts exist which are covered with a profusion of cactus, and in others there is no vegetation except that peculiar to arid land. Extending from the hills forming the boundary between the first and second prairie steppes there is much broken or park-like country. This is also met with in the Qu'Appelle River valley and in other parts of the zone. Poplar and oaks are the chief trees of the bluffs and the herbaceous vegetation, as may be expected, is made up of a mixture of prairie and woodland forms.

The major part of the second prairie steppe is true prairie, with no trees except in the river valleys. Shrubs occur, generally in low thickets or copses, and very frequently in small clumps composed of a single species. On the exposed prairie, where their growth always is stunted, occur: snowberry, silver berry, buffalo berry, saskatoon, roses, and others. In damp situations meadow sweet is met with, and in wet places, such as the borders of ponds and marshes, willows are abundant. The herbaceous vegetation varies somewhat with soil conditions but, taking the second prairie steppe as a whole, the numerous members of the pea family, which are met with everywhere, are perhaps the most characteristic flowering plants.



*Third Prairie Steppe.*—This includes the rest of the prairie up to the foothills of the Rocky mountains. In its northern parts, i.e. north of lat. 52°, the flora is very similar to that of the second prairie steppe, but in the southern parts it is very different.

Except on Wood mountain and Cypress hills no trees occur except along the borders of streams in the valleys, and the ponds, marshes, and lakes are not even fringed with shrubs. The rivers and creeks flow in deep, narrow valleys and the country in general is broken by coulees and low hills. The precipitation is scant and, as a result, the vegetation has a poverty-stricken appearance and is often almost desert-like in character. In fact, a large number of flowering plants occur which approach typical desert plants in being protected, in some way or other, against a too rapid loss of the moisture which they manage to absorb from the soil. Among such plants could be mentioned many species characterized by a dense grayish or white covering of thick, woolly hairs, and others which have no leaves.

Large districts, especially in the Coteau de Missouri belt, are characterized by the absence of drainage valleys, the result being that the water in the lakes and ponds is generally saline and that numerous alkali flats occur. The vegetation in such situations is sparse and largely made up of plants especially fitted for soils rich in salt. Indeed, in these inland ponds and marshes, a number of plants thrive which normally occur in profusion on the shores of the Atlantic ocean.

**The Rocky Mountains.**—A great number of prairie species reach a considerable altitude in the foothills of the Rocky mountains. On the other hand, a number of sub-alpine forms descend practically to the prairie, the result being that in the foothills, where the two types of vegetation intermingle, the flora is very rich in species. As the foothills and the lower slopes are ascended, the prairie forms gradually disappear and are replaced by mountain species. The vegetation in general becomes more luxuriant in appearance, the herbaceous plants grow taller, shrubs become an important feature in the flora, and finally real forests are reached.

In the well developed forests on the slopes the trees are largely coniferous, the principal ones being lodge-pole pine, whitebark pine, white spruce, balsam fir and, highest up, larch. The shrubs are few in number, except in open and springy places, where bewildering thickets composed of many species of willows are found. The herbaceous vegetation is also rather scant, except along the edges, in open spaces, and along brooks and rivulets. In the dense forest, members of the blue-berry and winter-green families are conspicuous.

On the grassy slopes above the tree line the herbaceous vegetation again becomes very rich in species, exhibiting the richness and brilliancy of colour in the flowers so characteristic of alpine vegetation in general, until, just below the snow line, it takes on an appearance suggestive of arctic vegetation. In fact, many species occur on the higher levels in the Rockies which also have their homes in the



arctic regions, a fact which may be satisfactorily explained, in the words of Darwin, as a result of conditions caused by the glacial period, as follows: "As the warmth returned (after the glaciation had reached its height) the arctic forms would retreat northward, closely followed up in their retreat by the productions of the more temperate regions. And as the snow melted from the bases of mountains, the arctic forms would seize on the cleared and thawed ground, always ascending higher and higher, as the warmth increased, whilst their brethren were pursuing their northern journey. Hence, when the warmth had fully returned the same arctic species, which had lately lived in a body together in the lowlands . . . . . would be left isolated on distant mountain summits (having been exterminated on all lesser heights) and in the arctic regions . . . . ."

**The Selkirk Mountains.**—While the Rockies may be looked upon as a chain of individual mountains, the Selkirk range has more the character of a high-level plateau from which the peaks rise. As a result there are real alpine meadows in the Selkirks whereas, in the Rockies, similar plant formations are generally met with on steep slopes. The differences in the vegetation of the Rockies and the Selkirks above the tree line are conspicuous and are due largely to differences in the amount of precipitation, the Selkirks being favoured with a much more abundant moisture supply. For this reason the alpine meadow plant associations of the Selkirks extend almost to the snow line and, for the same reason, a number of high-alpine plants, which in the Rockies are characteristic of the bare peaks above the grassy slopes, are not met with at all in the Selkirks.

The Selkirk forest differs from that of the Rocky mountains with regard to composition, as far as the trees are concerned, the principal species being cedar, Douglas fir, hemlock, and Engelmann's spruce. The undergrowth is, on the mountains proper, quite similar to that of the Rocky mountain forest and, although more luxuriant, is not represented by many species.

In the lower valleys, however, and on lower levels where the forest is more open in character, the shrubby as well as the herbaceous undergrowth is very different. Not only is it luxuriantly developed, but the species of which it is composed are of a different type. The Rocky mountain flora is disappearing, its place being taken to such an extent by Pacific coast species that the casual observer will find it rather difficult to detect any conspicuous difference between the flora of the Selkirk valleys and that of the coniferous forest of the Pacific coast.

**The Coast Mountains.**—Although having a large number of plant species in common with the Selkirks, the Coast range must be considered a distinct botanical zone, as many species occur there which are confined to the Pacific coast. The coast range is also the home of several species which are very local in their occurrence and which, as far as is known at present, do not grow anywhere else.

Owing to the long growing season, the high average temperature, and the abundance of the precipitation, the vegetation in the valleys and lowlands of the Coast range is almost sub-tropical in appearance. The trees, especially the cedar, the Douglas fir, and the spruce, reach gigantic dimensions, and the forest, even when very dense, possesses a luxuriant undergrowth. In old, untouched forests, fallen trunks, shrubs, and herbs form an almost impenetrable tangle. This is especially the case where salal and devil's club are luxuriantly developed.

Of trees characteristic of the valleys and the lowlands may be mentioned cedar, Douglas fir, Sitka spruce, hemlock, white fir, red alder, crabapple, broad-leaved maple, cascara, and of shrubs, several species of willows, Oregon grape, species of currants and gooseberries, thimbleberry, salmonberry, roses, juneberry or saskatoon, devil's club, salal, blueberries, and red-fruited elder.

The herbaceous vegetation is very rich. Many species of beautiful ferns are abundant, and the grass vegetation, especially along the coast, is luxuriantly developed. Of other herbaceous plants may be mentioned skunk cabbage, trillium, wild lily-of-the-valley, yellow pond lily, fringe-cup, false mitrewort, alum root, bleeding heart, goat's beard, twinflower, aster, etc.

The major part of Vancouver island has a typical Coast Range flora. The southeastern section, however, has a vegetation of a quite different type. There, the growth is influenced by the comparatively scant precipitation, with little rain between spring and fall. As a result the spring vegetation is much more conspicuous than the summer and fall vegetation, especially on open and rocky land. In addition, the section is characterized by a number of species which are more or less of a Californian type and which occur nowhere else in Canada. Among the plants in the southeastern section of Vancouver island may be mentioned an exceedingly large number of grasses among which the most conspicuous ones are several species of brome grasses, camas, wild hyacinth, blue-eyed grass, spring-beauty, lupins, bird-foot clover, tall vetch, marsh hollyhock, godetia, arbutus or madrona, gilia, grove-lover, paint-brush, etc.

**Dry Belts of British Columbia.**—A few words may finally be said about the most important dry belts of British Columbia, including the Okanagan and the Kamloops districts. These regions, owing to the scant precipitation and to the nature of the soil, have a flora which strangely contrasts with that of the other parts of the British Columbia mainland.

In the dry belts two floristic subdivisions may be recognized which, however, run more or less into each other and for this reason will not be dealt with separately. One subdivision is characterized by so-called bunch grasses, of which "wild rye" is the most conspicuous species, and is more or less destitute of forest-forming trees. The other floristic subdivision of the dry belts is more densely wooded, the characteristic tree of the forest being the yellow pine. On the whole, the dry belts may be said to be park-like in general character, with a rather desert-like ground vegetation.

## FAUNAS OF CANADA.

By P. A. TAVERNER, Department of Mines, Ottawa.

Whether the fauna of the western hemisphere was derived from that of the eastern, or *vice versa*, as is contended by various authorities, there is a close relationship between them, and one of these contentions is certainly true. Geological evidence shows that in previous ages types now found in but one of the great continental circumpolar divisions were once common to both. Old and now submerged land connections between the continents have been postulated both from zoological and geological evidence, and a more or less complete continuity of land throughout the northern hemisphere, in former times, must be acknowledged before present American biotal conditions can be thoroughly understood. That this connection was in the far north and in what is now arctic or sub-arctic climate did not prohibit a continual interchange of warmth-loving species, for the presence of coal in very high latitudes points to milder if not tropical or sub-tropical conditions where now we find perpetual snow and ice. We must therefore conceive of a pre-glacial time when tree-ferns and other luxuriant coal-producing forests occupied extreme northern lands, and such animals as elephants, horses and other warmth-loving species could spread from one continent to the other.

This intercontinental connection must have been made and broken numbers of times by the recurrence of glacial periods which covered this country with ice to well south of the present Great Lakes and must at times have formed barriers to the passage of life across the far north more complete even than we find today. During these periods of alternate isolation and connection there was ample time and opportunity for wide divergence in development in the faunas of the separated land masses, the extinction of connecting links and the occurrence of many complexities to confuse the clear picture of the historical succession until today we find a nearly identical circumpolar fauna at the north progressively breaking up and differentiating into peculiar and special New and Old World forms as it proceeds south.

Having considered the history and consequent relation of North American life to that of the world in general, we can take up the details of its distribution on our continent. The general trend of geographical distribution in Canada is from southeast to northwest. Ocean currents have much to do with this. Our east coast is chilled by the cold arctic current coming directly down from the polar ice fields through Davis strait, and the west coast is warmed by the grateful temperature of the great final sweep of the Japan current. When we realize that the barren Labrador coast of the gulf of St. Lawrence is in almost the same latitude as southern British Columbia and is slightly south of the most southerly point of the British Isles, we can see what a great and fundamental influence these ocean currents have on the distribution of life upon our continent. Elevation is another factor that has a determining influence on climate and the distribution of animal life. It is well known that high mountains



even in the tropics present arctic conditions at their peaks. Less elevation has similar effect in proportion to its height and often a rise of a few hundred feet will produce conditions that otherwise would only occur at considerable distance to the north. Not only do hill and mountain ranges thus project long tongues of northern faunas into southern localities but on the retreat of the ice at the end of glacial epochs they formed northern oases for the retreating cold-loving forms as they withdrew from the gradually warming lowlands. We thus have true arctic "relicts" of an ancient order isolated on mountain tops far from their natural geographical habitats,—boreal islands in a sea of more southern life.

The general outline of zonal life distribution is well known. All are familiar with the fact that tropical life differs from temperate and from arctic. Close study, however, shows that besides these broad and obvious associations are minor ones. Various attempts have been made to map them out, and perhaps the most successful and generally accepted one for our purposes is that by Dr. C. Hart Merriam. This divides North America into three regions, a Boreal, Austral and a Tropical one, with the first two each divided into three life zones: the Arctic, Hudsonian and Canadian zones for the Boreal region and the Transition, and Upper and Lower Austral zones for the Austral Region. In Canada we have five of these zones represented—from the north: the Arctic, Hudsonian, Canadian, Transition and Upper Austral. These extend across the continent, roughly agreeing with latitude, but thrown out of regularity, as previously indicated, by local conditions and agreeing closely with the mid-summer isotherms or temperature belts.

The Arctic zone is the so-called "barren land" of the far north, treeless and almost shrubless, and extends south to include all the north shore of the continent as well as the islands above. The distinctive land mammals of this zone are the polar bear, the musk ox, Barren Land caribou, arctic fox, arctic hare and lemming. Amongst the characteristic birds are snow buntings, ptarmigan, longspurs, snowy owl and the gyrfalcons. This is the great nesting ground for many of our waders and more northern ducks and geese. There are few residents, as most forms migrate in winter.

The Hudsonian zone is the land of scrub forests, small stunted trees, mostly coniferous, and scattered dwarf willows and poplars. The southern boundary of this zone extends from the north shore of the gulf of St. Lawrence to near the mouth of James Bay, thence in a wavy curve to Great Slave lake where it drops south suddenly to a latitude about on line with the lower point of the Alaska Pan-handle, and thence to near the coast. It thus includes the southern Ungava peninsula, a narrow belt extending northwest from James bay, the Yukon, northern British Columbia and southern Alaska. It is penetrated from the north by the Arctic zone which persists on the mountains of the Yukon and from the south by the Canadian zone which follows up the valleys of the Mackenzie and Peace rivers. It is shut off from the sea on the Pacific side by the Alaska Pan-handle which has an intrusive Canadian



fauna. On the other hand, it works down the Rocky mountains in a narrow band and scattered isolated spots to across the United States boundary. This zone can be considered more as a transition between the Canadian and Arctic zones than a primary division itself. It contains species whose centres of abundance are on either hand and a few peculiar to it. Musk oxen, caribou and ptarmigan range into it in winter from the north, and it forms the extreme northern distribution of woodland caribou and moose. Its most characteristic birds are the rough-legged hawk, great-grey owl, northern shrike, pine grosbeak, white-winged cross-bill and fox sparrow.

The Canadian zone occupies the greater area of Canada and can be roughly defined as the heavy coniferous forest belt. It includes practically all the remainder of the Dominion except the inner shores of the Nova Scotia peninsula, southern Ontario and Quebec in a narrow strip from about Montreal to just below Georgian bay on lake Huron, the prairies, a small irregular fringe along the Pacific coast opposite Vancouver island and a few mountain valleys penetrating the southern boundary of British Columbia. Beyond our borders it extends irregularly south on the mountains and high land near both coasts, including the south shores of lake Superior, and penetrates the Hudsonian zone on the north along the valleys of the Mackenzie and Peace rivers and runs up most of the Alaska Pan-handle. This is the first land fit for systematic cultivation. The characteristic life is more numerous than in the preceding zones and includes the moose, woodland caribou, lynx, marten, porcupine, varying hare, white-throated sparrow, numerous warblers, olive-backed thrush, three-toed woodpeckers, pileated woodpecker, spruce grouse and Canada jay.

The Transition zone is agriculturally the most important Canadian faunal division. It lies just along the southern border, including most of both shores of the bay of Fundy, Quebec, below the gulf of St. Lawrence, a narrow belt following the north shores of lakes Ontario and Erie, all of the western prairies and intrusive valleys into the south of British Columbia and the shores of the strait of Georgia. The name Transition well describes this fauna. It contains comparatively few distinctive species, but is where many northern and southern forms meet. Except in the prairies it is the country of the hardwood forests where many of the temperate and hardier fruits, vegetables and cereals reach their highest perfection and is the northern limit of some of the tenderer ones. Its southern limit lies in the United States below, striking almost squarely across the continent on a line with the lower points of the Great Lakes, with excursions southward along the mountain ranges east and west and penetrated by extensions of the Upper Austral fauna along warm lowland valleys in the west. It forms the northern limit of range of the cotton-tail and jack-rabbits and the American elk, and is just touched upon by the varying hare from the north; the common mole of the south meets the Star-nosed and Brewer's mole of the north and the wild cat partially replaces the Canada lynx. Amongst birds, the wild turkey, bob-white, two cuckoos, towhee, wood thrush and yellow-throated vireo are at the northern

limit of their ranges, and the Baltimore oriole, bluebird, catbird and bobolink overlap the solitary vireo and Wilson's thrush.

The Upper Austral zone in Canada is small in area but important in production. It just crosses our borders in a narrow shore belt along lake Erie extending to the south side of lake Ontario and including the Niagara Peninsula. It forms the famous Ontario fruit belt and is comparatively strongly marked by quite a number of characteristic forms, especially amongst plants. It extends south as far as the northern borders of the Gulf States, variously dotted and cut into by intrusive branches of the neighbouring faunas from either side, especially in the broken country of the west.

There are not many peculiar mammals that are well known to the general public, and perhaps the opossum is the most distinctive. Among birds we have the yellow-breasted chat, mockingbird, Carolina wren, Carolina chickadee, orchard oriole, barn owl, a number of distinctive southern warblers and southern subspecific forms allied to more northern variations.

These make the latitudinal or thermal divisions of our faunal life. Outside of the species mentioned are numerous forms that extend over the whole area, but show in different zones variations recognizable to the expert but stopping short of specific distinction. A good example is the hairy woodpecker. This bird breeds over all the wooded parts of North America, but the birds from the Lower Austral zone are quite separable by the trained eye from those of the Upper Austral and Transition and these from the large northern form of the Hudsonian. This is but one case of many where a northern and a southern race exist in the same species and which we designate subspecies. Some of these geographical races are so slightly differentiated as to require an expert to separate them while others are marked and striking. The critical difference between a full species and a subspecies is the fact that the latter intergrade and blend into each other gradually. With species the break between is sudden, and intermediates do not occur.

With this zonal distribution and a variation of life groups depending basically upon temperature, we have another system of distribution east and west, depending largely upon physical conditions of habitat—the arrangement of land and water or mountain ranges forming barriers or highways of migration and leading certain forms in certain directions while barring them from others—and the comparative rainfall and humidity of climate. This has a primary direct influence upon the forms of life we are considering, as well as a secondary and indirect one through the plants and insects which give them food or shelter.

The principal divisions east and west are divided by the Rocky mountains, which successfully cut the Pacific coast off from close contact with eastern forms. This great backbone of the continent extends in a northwesterly direction and forms the political boundary between Alberta and British Columbia. An extension of this line until it strikes the centre of the main Alaska-Yukon boundary roughly approximates the dividing line of the east and west faunas, leaving a

triangular patch to the west including British Columbia, southern Yukon and southern Alaska as the western or mountain fauna, and cutting through three of the trans-continental zones, the Transition, Canadian and Hudsonian with fragments of the arctic on the higher elevations to the north.

The mountain district is characterized by an abundant rainfall, a high average humidity and a greatly diversified and rugged topography, forming a succession of mountain ranges with deep valleys between, paralleling the coast, facilitating intercommunication in this direction but obstructing it from east to west. These topographical conditions continue to the south well into Mexico and enforce migration routes and conditions and associations more or less isolated. The marked humidity of the climate, especially near the coast, also causes or encourages special physiological changes in numerous organisms tending as a rule to produce larger size and browner or richer colouration. These differences in physical conditions and the isolation formed by the barrier mountains have produced a great number of forms peculiar to the trans-mountain district. In fact, comparatively few species, either of birds or animals, extend across the mountains from the east unmodified, and the native population can be divided into three heads: subspecific variations of eastern forms, species confined to the area and forms of evident mountain origin but spreading from them a certain distance eastward. Typical amongst the first may be mentioned the moose and woodland caribou, the Oregon subspecies of the ruffed grouse, Harris' Rocky-mountain and Gairdner's woodpeckers, northwest flicker, dusky and streaked horned larks, many forms of the warblers and sparrows and others.

Of full species confined to this fauna are: Douglas squirrel, black-tailed deer, pika, yellow-bellied marmot, bushy-tailed wood rat, little striped skunk or spilogale, blue and Franklin's grouse, band-tailed pigeon, red-breasted and Williamson's sapsucker, Steller's jay, black and Vaux swift, black-chinned and rufous hummingbirds, Clark's nutcracker, northwestern crow, dipper, chestnut-backed chickadee, varied thrush and others. Of forms typical of the mountains but spreading a little way east are: hoary marmot, mule deer, grizzly bear, red-naped sapsucker, Lewis's woodpecker, red-shafted flicker, Hammond's and Wright's flycatcher, black headed grosbeak and many more.

The Eastern fauna is comparatively homogeneous across the continent in a diagonal direction from the Atlantic coast to Alaska, with but slight variation in physical aspect, except in the prairie region of the central west. It is a country of low, even topography with good rainfall and covered with a uniform forest of little variety except such as is due to latitude and zonal distribution, but into it project the upper limits of the Great Plains characterized by great dryness, near-desert conditions and almost an entire absence of trees. This penetrates the moist continental fauna as a semicircular extension of the Transition zone, its chord on the international boundary extending from the eastern Manitoban line to the mountains and north to Edmonton and Prince Albert.



The general tendency of this prairie fauna is towards small size and pale, bleached colouration. Such species as are characteristic of it are those like the prong-horn antelope, bison, coyote, gopher, prairie chicken, sage hen, burrowing owl, Leconte's sparrow, and lark bunting whose open country requirements debar them from wooded land. The remainder of its fauna is similar to that of the eastern country but generally subspecifically differentiated from it through the dryer climate and desert-like conditions. Some species that can be exemplified under this division are western horned owl, Say's phoebe, desert horned lark, pale goldfinch, western clay-coloured sparrow, Dakota song sparrow, prairie marsh wren, etc.

The true Eastern fauna, though generally similar from the far northwest to the Atlantic coast, does show a slight tendency to variation north of these plains, but the influence is slight and in broad treatment can be disregarded. Many species extend unmodified throughout the area, or when modification occurs it can usually be attributed to either thermal differences or the influence of the closely allied neighbouring prairie forms it comes into contact with in migration or on its edges. In general, most of the subspecific forms mentioned as prairie or western are represented by type subspecies in this great eastern fauna, which is perhaps the typical fauna of Canada and which gives distinctive character to our biotal resources.

#### ECONOMIC GEOLOGY OF CANADA, 1920-1921.

By WYATT MALCOLM, Geological Survey, Ottawa.

The purpose of the writer in presenting this paper is to call attention to the most important reports and articles treating of the economic geology of Canada, published during 1920 and 1921. Brief notes are given on the contents of the most important reports. It is hoped also that this paper will serve to indicate where detailed information regarding the mineral resources of the country may be obtained, since the articles reviewed, although recently published, do not necessarily contain the best and most complete information on the subject. The numbers appearing in brackets after the names of writers refer to the publishers listed at the end.

**Bauxite.**—This is the mineral from which the metal aluminum is produced. As Canadian manufacturers are dependent on foreign sources of supply of this raw material and as geological conditions in parts of British Columbia appear favourable to its occurrence, the Munition Resources Commission of Canada authorized W. F. FERRIER to make a search for this mineral in the Interior plateau region during parts of the field seasons of 1917 and 1918. Although no discovery of bauxite was made the report on the work contains valuable geological and mineralogical information. It appears in the final report of the Munition Resources Commission.

**Chromite.**—The results of certain investigations made by the Munition Resources Commission of Canada appear in their final report. W. F. FERRIER reports on a deposit about 6 miles from



Ashcroft, B.C., where finely crystalline chromite is found in serpentine. J. C. GWILLIM reports on the chromite situation in Quebec. A description is given by L. REINECKE (1) of the deposit discovered about 20 years ago on Chrome creek, a tributary of Scottie creek.

**Clays and Shales.**—Among the most important clays tested and reported on by J. KEELE (1, 2, and 3) are the fire clays of Mesozoic age on Mattagami and Missinaibi rivers, northern Ontario and some residual clays from British Columbia. Residual clay from central British Columbia is reported as suitable when mixed with more plastic clay for the manufacture of firebrick, or for sewerpipe. The Mesozoic clay deposits of northern Ontario were examined in the field by J. KEELE. Laboratory tests show that they are suitable for the manufacture of a wide range of products such as stoneware goods, sewer pipe and other vitrified products. Some of the clay is of very high grade and would be suitable in the crude state for retorts, crucibles or fire brick, and if washed could be used for the manufacture of electric or sanitary porcelain and floor and wall tiles. MARY E. YOUNG (2) contributes the results of interesting investigations on the pottery clays of Canada.

**Coal.**—A description of the coal fields of the upper Highwood river, Alberta, is given by BRUCE ROSE (1). There are no working mines in the area, but the coal measures have been well prospected on Cat creek. Fourteen seams ranging from 4 feet to 38 feet in thickness are here exposed in a distance of about three quarters of a mile across the Kootenay measures. From these it should be practicable to mine coal with a carbon content of 70 per cent and an ash content of less than 15 per cent. The geology of the upper Elk River basin has been described by J. MARSHALL (1). Here also the Kootenay measures have been found to carry a number of thick seams of bituminous coal. The coal fields of the Crownsnest pass, British Columbia, where very thick seams of Kootenay coal have been mined for many years, are described in a paper by ROBERT STRACHAN (6).

In a paper by A. MACLEAN (6) information is given in concise form regarding the lignite seams of southeastern Saskatchewan, their thickness, areal extent, depth and estimated reserves. The question of the extent and character of the lower seams is also discussed by D. B. DOWLING (1).

A short report by A. McVICAR (1) contains information regarding a number of coal seams found in an unprospected area northwest of Brulé lake, Alberta; investigations into the stratigraphy of the Sydney coal basin, Nova Scotia, are presented by W. A. BELL (1); and G. A. YOUNG (1) presents a consideration of the possibilities of the occurrence of a commercial seam of coal in Gloucester county, New Brunswick, and offers suggestions on the method of prospecting the area.

**Copper.**—A number of papers appeared during 1920 and 1921 descriptive of copper deposits of British Columbia and Manitoba. The copper produced in Ontario is derived from the nickel-copper deposits of Sudbury and papers on these will be referred to under the heading "Nickel."

In northern Manitoba a body of copper ore at the Mandy mine was found sufficiently high grade to permit of long haulage by horse teams and by water to the railway and by rail to the smelter at Trail in southern British Columbia. Notes on the discovery and exploitation of this ore body are given by J. E. SPURR in the *Engineering and Mining Journal* and G. R. BANCROFT in a bulletin of the Canadian Institute of Mining and Metallurgy. A description of the Flinflon mineral deposit, a large low grade copper deposit in the vicinity of the Mandy mine, is given by R. C. WALLACE in the *Canadian Mining Journal*, 1921. The Geological Survey publishes the results of a careful study of the Sunloch ore bodies, Vancouver island, made by V. DOLMAGE. Valuable papers describing the geological features of a number of copper deposits have appeared in scientific periodicals. In *Economic Geology* are papers by V. DOLMAGE on the Marble Bay mine, Texada island, and by E. L. BRUCE and GEORGE HANSON on the copper deposits of Manitoba. In the *Transactions of the Canadian Mining Institute* papers by E. E. CAMPBELL on the Hidden Creek mine at Anyox and by J. J. O'NEILL on native copper deposits of the Arctic appear.

**Fluorspar.**—This mineral is used as a flux in metallurgical processes and as a source of fluorine in the manufacture of hydrofluoric acid. The two sources of fluorspar in Canada are the Rock Candy mine near Grand Forks, southern British Columbia, and a number of mines in the vicinity of Madoc, Ontario. The Madoc deposits have been examined by M. E. WILSON (1), who gives a general description of their mode of occurrence, discusses the problem of their origin, and describes in detail the various properties.

**Gold.**—Several valuable reports on gold mining districts or prospective gold mining districts of Canada were published by government departments during 1920 and 1921. Among the most valuable of these are several reports on Ontario gold deposits. An important contribution to our knowledge of the geology and ore deposits of Kirkland lake, next to Porcupine the most productive gold mining district of Ontario, is made by A. G. BURROWS (3) and P. E. HOPKINS. The report is accompanied by a detailed map on a scale of 600 feet to one inch. The ore bodies consist of lodes or composite veins formed under strong compressive forces with the solutions following openings along fracture planes in an irregular manner and partly replacing porphyry or other country rock adjacent to the fracture planes. The lenses of quartz are sometimes several feet wide and contain visible gold with tellurides, pyrite, chalcopyrite and molybdenite. Some of the ore shows very little vein quartz, and specimens of altered red syenite have been found to contain grains of gold in the secondary minerals.

Other gold areas in Ontario that have been described are: Matachewan area by H. E. COOKE (1) and A. G. BURROWS (3); West Shining Tree by P. E. HOPKINS (3); Ben Nevis and Argonaut areas by C. W. KNIGHT (3); Schreiber by T. L. TANTON (1); and Goudreau by A. G. BURROWS (3).

Gold deposits occurring in rocks of Precambrian age in the vicinity of lake Demontigny, Timiskaming county, about 30 miles south of the National Transcontinental railway have been described by A. MAILLIOT (4). The gold occurs in quartz veins in which tourmaline is sometimes found in abundance.

Northern Manitoba has in recent years attracted considerable attention on account of its mineral possibilities. Gold deposits on Wekusko lake were considered sufficiently rich to justify a considerable capital expenditure in their development and exploitation. These have been described by F. J. ALCOCK (1 and 6). A short description by R. C. WALLACE of the recent gold discovery on Elbow lake appeared in the *Canadian Mining Journal*, 1921.

Notes on numerous gold mines and prospects in British Columbia have been presented by Resident Engineers (5) of the provincial Department of Mines and by members of the staff of the Geological Survey (1).

A contribution to our knowledge of the placer gold deposits of Yukon is made by W. E. COCKFIELD (1) who in a detailed report describes the deposits of Sixty-mile and Ladue rivers. The report also sets forth the general topographical and geological features of the section of country drained by these rivers.

**Graphite.**—A monograph by HUGH S. SPENCE (2) entitled "Graphite" contains descriptions of the known Canadian deposits of graphite together with notes on the history of their development. It deals with the different methods of concentrating and refining graphite, and the uses of the product, and presents a survey of the general situation of the graphite industry in Canada. Papers by H. P. H. BRUMELL on graphite in Quebec have appeared in the *Transactions of the Canadian Mining Institute* and in the *Engineering and Mining Journal*.

**Iron.**—In a paper entitled "Michipicoten Iron Ranges," W. H. COLLINS (6) describes an enormous body of sideritic iron ore found at the Helen mine, gives notes on the pyrite deposits of the Michipicoten area, points out the stratigraphic sequence to be observed in the iron ranges and the existing structural relations. Deposits of siderite occurring on Mattagami river about 80 miles north of the National Transcontinental railway have been examined and described by J. G. CROSS (3) for the Department of Mines, Toronto. The limonite deposits of Taseko River valley, British Columbia, which have attracted considerable attention, are described by W. M. BREWER (5), F. J. CROSSLAND (5) and J. D. MACKENZIE (1).

Much interest has been shown in recent years in the mineral possibilities of the part of the country adjacent to Hudson bay. Very little had been known regarding the Belcher islands until recently. A description of the geological features of these islands and of the iron formation found on them is given by E. S. MOORE in the *Transactions of the Canadian Mining Institute*, 1919, and by E. S. MOORE and D. E. WOODBRIDGE in the *Engineering and Mining Journal*, 1920 and 1921.



**Lead and Zinc.**—The argentiferous lead deposits of the Mayo district, Yukon, that have recently attracted much attention have been described by W. E. COCKFIELD (1). These are sufficiently rich in silver to bear the heavy transportation charges from the interior of Yukon.

The geological features of the Slocan area, British Columbia, are described by M. F. BANCROFT (1), and papers by J. C. BEIDELMAN and A. MAILHIOT in the Canadian Mining Journal and the Transactions of the Canadian Mining Institute respectively give descriptions of a zinc-lead deposit of considerable promise near the head of Cascadia river, Gaspé, Quebec.

**Manganese.**—The final report of the Munition Resources Commission of Canada presents the results of investigations made by J. C. GWILLIM, G. C. MACKENZIE and W. L. UGLOW into numerous manganese deposits in Nova Scotia, New Brunswick, and British Columbia. The lack of shipping available during the war for the transportation of manganese ore from foreign sources rendered it imperative that North American deposits of sufficiently high grade material be opened and exploited to the utmost, and attention was thus directed to the possibilities of Canada's resources in manganese.

**Molybdenite.**—Owing to the demand during the war for molybdenite, examinations were made for the Munition Resources Commission of Canada by J. C. GWILLIM of a great number of molybdenite deposits in the provinces of Nova Scotia, Quebec, Ontario, and British Columbia. Descriptions of these appear in the final report of the Commission. Papers on the molybdenite deposits of La Corne township, Abitibi, Quebec, and in the lower Ottawa valley by A. MAILHIOT (4) and M. E. WILSON (6) respectively, have been published.

**Nickel.**—The nickel deposits of Canada continue to demand considerable attention from geologists, not disproportionate, however, to their economic importance. One of the most valuable contributions made in recent years bearing on the question of the origin of the Sudbury ores is that made by the staff of the International Nickel Company of Canada Limited (6), in an article describing the mining and smelting operations of the company. The article contains a description of the Creighton ore body and is illustrated by a cross section showing in an illuminating manner the geological relations existing between the ore body and adjacent rocks. It is claimed that facts have been disclosed that indicate that the ore was introduced in a molten condition along a plane of shearing in the footwall rocks adjacent to the norite after the norite had solidified. The question of the origin of the nickel-copper ores of Sudbury is also discussed by W. LINDGREN and J. W. YOUNG in Economic Geology and the Bulletin of the Canadian Institute of Mining and Metallurgy respectively.

Although Canada produces over three-quarters of the world's consumption of nickel much interest is taken in any discoveries that



might lead to an increase of the country's ore reserves. Results of investigations of the Windy Lake area which lies in that part of the Sudbury area known as the northern nickel range are presented by C. W. KNIGHT (3). A number of other occurrences of nickel minerals in Ontario are described by the same writer (3), and a deposit lying south of lake Shebandowan west of Fort William is described by J. G. CROSS (3). A deposit has been discovered on Maskwa river in the province of Manitoba in which minerals similar to those of the Sudbury district are associated with norite. R. J. COLONY (6) who made an examination states that the copper content of a large number of samples analysed ranged from 0.68 per cent to 3.60 per cent, the nickel content from 0.29 per cent to 1.68 per cent and the platinum content from 0.01 ounces to 0.03 ounces per ton. The deposit has also been examined and mapped by W. S. McCANN (1) who describes the geological relationships of the occurrence.

**Petroleum.**—The prominence of the oil question in recent years has led to much government investigation into the geological features of areas where it has been thought that conditions might exist favourable to the occurrence of petroleum. An area that has attracted world-wide attention is the Mackenzie River basin. Oil was struck in 1920 in a well drilled on Mackenzie river at a point 45 miles below Norman. The oil occurs in rocks of Devonian age. Formations of the Devonian system are of wide distribution throughout the Mackenzie basin, oil seepages are numerous, and further drilling operations may reveal great possibilities. The sedimentary succession and the structural features of the Norman area are described by E. M. KINDLE and T. O. BOSWORTH (1), and by J. NESS (6), and the question of oil possibilities on Great Slave lake is discussed by G. S. HUME (1).

Considerable drilling has been done in the province of Alberta. Notes on geological conditions existing at the points where drilling operations were conducted, and on the progress of operations are given by D. B. DOWLING (1). The results of detailed investigations in the operating oil field of Alberta on Sheep river are presented by S. E. SLIPPER (1), and a report on the geology of the Pouce Coupé area by J. A. ALLAN and A. E. CAMERON is to be found in the Mining and Engineering Record.

Attention has also been given to the oil possibilities of the Peace River section of British Columbia. Investigations into the geological formations were made by J. C. GWILLIM, J. A. DRESSER and E. M. SPIEKER for the Department of Lands, British Columbia, by which reports were published.

A study has been made by M. Y. WILLIAMS (1) of the palæozoic formations exposed along Abitibi, Mattagami and Albany rivers with a view to ascertaining their oil possibilities. Mr. WILLIAMS (1) has also reported on the oil possibilities of Manitoulin island and on parts of southwestern Ontario.

**Phosphate.**—A monograph on phosphate in Canada by H. S. SPENCE (2) appeared in 1921. A chapter is devoted to the manufacture of phosphorus products in Canada, but the greater part of the report is devoted to a description of apatite deposits of the provinces of Ontario and Quebec. The history of phosphate mining in Canada shows that the industry flourished for a number of years. The discovery of the cheaply mined Florida deposits, however, had a serious effect upon the Canadian industry, and since about 1894 little phosphate has been produced except as a by-product in the mining of mica.

**Platinum.**—Owing to the increased demand during the war for platinum for use in the chemical industries and in internal combustion engines much interest was shown in the possibilities of obtaining a greater supply from Canadian sources. The Munition Resources Commission of Canada made investigations of the placers of Tulameen river, B.C., where a small annual production of platinum is made, of other placers in British Columbia and Alberta where the occurrence of platinum had been reported, and of certain sulphide deposits. The results of the investigations, which unfortunately did not lead to the discovery of any important sources of the metal, are set forth in the final report of the Commission, and in the publications of the Canadian Mining Institute.

**Road Materials.**—Investigations have been made by K. A. CLARK, R. H. PICHER, and H. GAUTHIER (2) into the materials suitable for road construction found in the vicinity of some of the main highways of the country. Outcrops of bed rock and deposits of boulders and gravel have been examined and laboratory tests made of samples taken from these deposits. Some of the areas examined are those along the Montreal-Toronto highway, from the Quebec boundary to Prescott and from Napanee to Port Hope; different points in eastern Ontario and southwestern Quebec; between Winnipeg and Brandon; and the Rocky Mountain park. The problem of the utilization of the bituminous sand of Athabaska river in road construction in Alberta is discussed by G. C. PARKER (2).

**Salt.**—The Malagash salt deposit, Nova Scotia, which was discovered a few years ago, is described by A. O. HAYES (1). The salt is pure enough and near enough to the surface to be recovered economically by mining and it is the only deposit in Canada that is worked by this method. The main salt industry of the country is in Ontario where borings are made and the salt brought to the surface in the form of brine.

The discovery of rock salt in a boring made at McMurray, Northern Alberta, is of importance. In a well drilled to a depth of 685 feet a bed of 14 feet of transparent commercial rock salt was penetrated between 648 and 662 feet. In the lower 55 feet of the well there is possibly 25 to 40 feet of comparatively pure rock salt interbedded with anhydrite and shale. The discovery is described by J. A. ALLAN in the Second Annual Report on the Mineral Resources of Alberta.

**Silica and Moulding Sand.**—A preliminary report on the results of investigations of silica deposits of eastern Canada has been made by L. H. COLE (2). Short descriptions are given of the character of numerous deposits of sand, sandstone, quartzite and quartz of high silica content together with analyses of samples. The results indicate that there are in eastern Canada a number of localities conveniently situated with respect to consuming centres where good grades of silica could be profitably produced. Notes are also given on deposits of moulding sand in eastern Canada.

**Silver.**—Two silver camps that have recently attracted considerable attention have received detailed study by the Geological Survey. These are the Mayo district, Yukon, and the Salmon River district, British Columbia. The former, where rich argentiferous galena is being mined, has been mapped by and reported on by W. E. COCKFIELD (1); the latter has been studied by J. J. O'NEILL, S. J. SCHOFIELD and G. HANSON (1), short reports have been made and a map prepared.

The ore deposits of Cobalt camp have not lost interest and contributions to the study of the origin of these ores were made in *Economic Geology*, 1920, by A. R. WHITMAN and W. L. WHITEHEAD. The Gowganda camp, which might be considered a satellite of the Cobalt camp, has been re-studied and reported on by A. G. BURROWS (3). A study of the geology of the north shore of lake Superior in the vicinity of Silver islet where a rich silver deposit was mined many years ago was made by T. L. TANTON (1 and 6) with a view to determining the relationship of mineralization to the faulting system, and thus giving direction to further search for silver.

**Tungsten.**—The final report of the Munition Resources Commission of Canada contains reports by J. C. GWILLIM on tungsten deposits of New Brunswick and Nova Scotia. Near Burnt Hill brook, New Brunswick, quartz veins carrying wolframite are found in slates near the contact of an intrusive granite mass; 12 miles southeast of Middle Musquodoboit, Nova Scotia, scheelite-bearing veins are found in the altered sediments known as the gold-bearing series. Shipments have been made from both places.

**Miscellaneous.**—Mineral deposits of a great variety are described by L. REINECKE (1) in a report on the mineral deposits between Lillooet and Prince George, B.C. Among the most important of these are hydromagnesite and epsomite or hydromagnesium sulphate, commonly known as epsom salt. The epsomite occurs in commercial quantities in small lakes having no outlet. These lakes are found near Clinton, B.C. Similar deposits occur near Basque and on Kruger mountain. An estimate is made of the amount of commercial material available in the hydromagnesite deposits. Mr. Reinecke also gives interesting notes on the geological occurrence of peridot found in basalt on the summit of Timothy mountain.

Certain deposits of infusorial earth, also known as diatomaceous earth, occurring at a number of points in the western part of Nova

Scotia have been described by E. R. FARIBAULT (1). A deposit of this material in Colchester county has been worked for many years, the product being used in the manufacture of rubber goods and silver polish.

The results of a study of the Pleistocene geology of parts of Manitoba have been presented by W. A. JOHNSON (1). This includes townships 1-10, ranges 8-18, east of the principal meridian, and townships 30-37, ranges 16-23, west of the principal meridian. The soils derived from the Pleistocene deposits are classified and the report is accompanied by maps showing the distribution of the soils.

An interesting occurrence of native mercury on Sechart channel, Vancouver island, is thought by V. DOLMAGE (1), who examined it to be encouraging enough to justify thorough prospecting.

Investigations made by J. C. McLENNAN (2) and others show that the element helium is found in the Bow Island natural gas, Alberta, to the extent of 0.29 per cent. Helium is a non-inflammable gas superior to hydrogen for the inflation of balloons.

H. FRECHETTE (2) has made a study of the limestone deposits of Ontario and Quebec and presents analyses of samples of limestone and dolomite obtainable at different quarries.

Surveys of peat bogs in Ontario and Quebec have been made by A. ANREP (1).

#### SOURCES OF REPORTS AND ARTICLES REFERRED TO IN THE TEXT.

(1) Geological Survey, Ottawa. (2) Mines Branch, Department of Mines, Ottawa. (3) Department of Mines, Toronto, Ontario. (4) Mines Branch, Department of Colonization, Mines and Fisheries, Quebec. (5) Department of Mines, Victoria, B.C. (6) Canadian Institute of Mining and Metallurgy, Drummond Building, Montreal, Quebec.

## V.—AREA AND POPULATION.

**Area by Provinces and Territories.**—Table 1 shows the total area of the Dominion in land and water and its distribution into provinces and territories.

1.—Land and Water Area of Canada by Provinces and Territories as in 1921.

Provinces.	Land.	Water.	Total Land and Water.
	sq. miles.	sq. miles.	sq. miles.
Prince Edward Island.....	2,184	—	2,184
Nova Scotia.....	21,068	360	21,428
New Brunswick.....	27,911	74	27,985
Quebec.....	690,865	15,969	706,834
Ontario.....	365,880	41,382	407,262
Manitoba.....	231,926	19,906	251,832
Saskatchewan.....	242,808	8,892	251,700
Alberta.....	252,925	2,360	255,285
British Columbia.....	353,416	2,439	355,855
Yukon.....	206,427	649	207,076
Northwest Territories—			
Franklin.....	500,000	—	500,000
Keewatin.....	205,973	6,851	212,824
MacKenzie.....	501,953	27,447	529,400
<b>Total.....</b>	<b>3,603,336</b>	<b>126,329</b>	<b>3,729,665</b>



The water area is exclusive of Hudson bay, Ungava bay, the bay of Fundy, the gulf of St. Lawrence and all other tidal waters, excepting that portion of the river St. Lawrence which is between Pointe-des-Monts and the foot of lake St. Peter, in Quebec.

**Increase of Population.**—The decade between 1911 and 1921 was peculiarly unfavourable to a rapid growth of population among the white races of the world, since by them the Great War was mainly waged. The war and the pestilence and famine which followed the war both devastated Europe and affected the newer countries by drying up the sources of their immigration. Their effect on immigration to Canada will be seen in Table 20 of this section of the Year Book.

According to the final results of the sixth census of the Dominion of Canada, the total population on June 1, 1921, was 8,788,483, as compared with 7,206,643 on June 1, 1911, an increase of 1,581,840 or 21·95 per cent in the decade, as compared with 34·17 per cent during the decade from 1901 to 1911. Reduced as is the rate of increase during the past ten years, it is yet higher than the rate of increase in any other of the principal countries of the British Empire except Australia, where the rate was only slightly greater, and considerably higher than that of the United States.

The countries which comprise the British Empire, as also the United States, have on the whole suffered much less in actual loss of life from the war and its consequences than have the continental countries of Europe. None of them has actually declined in population during the period, as many continental European countries have done. Their percentage increases, however, have in almost all cases been lower than in the previous decade. Thus the population of England and Wales increased between 1911 and 1921 only from 36,070,492 to 37,885,242, or 4·93 per cent, as compared with an increase of 10·89 per cent in the previous decade; Scotland, again, increased only from 4,760,904 to 4,882,288, or 2·5 per cent, as compared with 6·5 per cent between 1901 and 1911.

Of the oversea Dominions, New Zealand increased from 1,008,468 to 1,218,270 or 20·8 per cent, as compared with 30·5 per cent, while the white population of South Africa increased from 1,276,242 to 1,522,442 or 19·3 per cent. On the other hand, the Commonwealth of Australia, the only Dominion to grow more rapidly in the second decade of the twentieth century than in the first, increased from 4,455,005 in 1911 to 5,436,794 in 1921, or 22·04 per cent, as compared with 18·05 per cent. The population of the continental United States increased between 1910 and 1920 from 91,972,266 to 105,710,620, an increase of 14·9 per cent as compared with 21 per cent in the preceding decade.

Considering now the Dominion of Canada itself, it becomes evident from Tables 2 and 3 that in this country, as formerly in the United States, there is a distinct movement of population from East to West. In the decade from 1911 to 1921, there occurred in

the four Western provinces an increase of population from 1,720,601 to 2,480,664 or 44·2 per cent, while the five Eastern provinces increased from 5,471,023 to 6,295,189, an increase of 824,166 persons, which, though absolutely larger than the figure for the West, constitutes an increase of only 15 per cent over the 1911 population. The same conclusion may be deduced from Table 3, which shows that while in 1871 only 2·96 per cent and in 1881 only 3·88 per cent of the population of the country dwelt west of the Lake of the Woods, the percentage in 1891 was 7·24, in 1901, 12·02, in 1911, 24·09 and in 1921, 28·37 per cent. On the other hand, the three easternmost Maritime provinces, which in 1871 contained 20·80 per cent of the population of the Dominion, had in 1881, 20·14 per cent, in 1891, 18·22 per cent, in 1901, 16·64 per cent, in 1911, 13·01 per cent, and in 1921 only 11·38 per cent of the population. Ontario and Quebec—the old pre-Confederation Province of Canada—still remain the chief centre of population, their population being in 1921 60·25 per cent of the total as compared with 76·24 per cent in 1871, 75·98 per cent in 1881, 74·54 per cent in 1891, 71·34 per cent in 1901, and 62·90 per cent in 1911. In other words, the net result of the half century has been that in 1921 only three-fifths of the population of the Dominion lived in these provinces as compared with more than three-fourths in 1871.

The absolute and percentage increases of population by provinces and territories are shown for the last decade in Table 4, which shows that Alberta and Saskatchewan increased proportionately most rapidly during the period, followed by British Columbia and Manitoba. Ontario and Quebec showed a fair percentage of increase and the Maritimes a small one, while Prince Edward Island—an almost purely agricultural province—and the Yukon—a mining camp—showed a decline in population. Absolute increases since 1871 are shown by decades in Table 5, and percentage increases since 1871 by decades in Table 6.

**2.—Population of Canada by Provinces and Territories in the Census years 1871 to 1921.**

Provinces.	1871.	1881.	1891.	1901.	1911.	1921.
Prince Edward Island.....	94,021	108,891	109,078	103,259	93,728	88,615
Nova Scotia.....	387,800	440,572	450,396	459,574	492,338	523,837
New Brunswick.....	285,594	321,233	321,263	331,120	351,889	387,876
Quebec.....	1,191,516	1,359,027	1,488,535	1,648,898	2,005,776 <sup>2</sup>	2,361,199
Ontario.....	1,620,851	1,926,922	2,114,321	2,182,947	2,527,292 <sup>2</sup>	2,933,662
Manitoba.....	25,228	62,260	152,506	255,211	461,394 <sup>2</sup>	610,118
Saskatchewan.....	—	—	—	91,279	492,432	757,510
Alberta.....	—	—	—	73,022	374,255 <sup>3</sup>	588,454
British Columbia.....	36,247	49,459	98,173	178,657	392,480	524,582
Yukon Territory.....	—	—	—	27,219	8,512	4,157
Northwest Territories.....	48,000	56,446	98,967	20,129	6,507 <sup>2</sup>	7,988
Royal Canadian Navy.....	—	—	—	—	—	485
<b>Total.....</b>	<b>3,689,257</b>	<b>4,324,810</b>	<b>4,833,239</b>	<b>5,371,315</b>	<b>7,206,643</b>	<b>8,788,483</b>

<sup>1</sup> The population of the Prairie Provinces, according to the quinquennial census of 1916, is given on page 113. <sup>2</sup> As corrected as a result of the Extension of Boundaries Act, 1912. <sup>3</sup> As corrected by transfer of population of Fort Smith (368) to Northwest Territories. <sup>4</sup> The decrease shown in the population of the Northwest Territories after 1891 is due to the separation therefrom of vast areas to form Alberta, Saskatchewan and the Yukon Territory, and to extend the boundaries of Quebec, Ontario and Manitoba.

### 3.—Percentage Distribution of Canadian Population by Provinces and Territories, 1871 to 1921.

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	2.55	2.52	2.25	1.92	1.30	1.01
Nova Scotia.....	10.51	10.19	9.32	8.56	6.83	5.96
New Brunswick.....	7.74	7.43	6.65	6.16	4.88	4.41
Quebec.....	32.30	31.42	30.80	30.70	27.83	26.87
Ontario.....	43.94	44.56	43.74	40.64	35.07	33.38
Manitoba.....	0.68	1.44	3.16	4.75	6.40	6.94
Saskatchewan.....	—	—	—	1.70	6.84	8.62
Alberta.....	—	—	—	1.36	5.19	6.70
British Columbia.....	0.98	1.14	2.03	3.33	5.45	5.97
Yukon Territory.....	—	—	—	0.51	0.12	0.05
Northwest Territories.....	1.30	1.30	2.05	0.37	0.09	0.09
Royal Canadian Navy.....	—	—	—	—	—	—
	100.00	100.00	100.00	100.00	100.00	100.00

### 4.—Absolute and Percentage Increase of Population of Canada by Provinces and Territories, 1921 as compared with 1911.

Province or Territory.	1911.	1921.	Increase of 1921 over 1911.	
			Number.	Per cent.
Prince Edward Island.....	93,728	88,615	—5,113	— 5.46
Nova Scotia.....	492,338	523,837	31,499	6.40
New Brunswick.....	351,889	387,876	35,987	10.25
Quebec.....	2,005,776	2,361,199	355,423	17.72
Ontario.....	2,527,292	2,933,662	406,370	16.08
Manitoba.....	461,394	610,118	148,724	32.23
Saskatchewan.....	492,432	757,510	265,078	53.80
Alberta.....	374,295	588,454	214,159	57.22
British Columbia.....	392,480	524,582	132,102	33.66
Yukon Territory.....	8,512	4,157	—4,355	—51.16
Northwest Territories.....	6,507	7,988	1,481	22.76
Royal Canadian Navy.....	—	485	485	—
<b>Totals for Canada.....</b>	<b>7,206,643</b>	<b>8,788,483</b>	<b>1,581,840</b>	<b>21.95</b>

NOTE.—The sign (—) denotes a decrease.

### 5.—Population of Canada by Provinces and Territories in 1871 and 1921, and numerical increase in each decade from 1871 to 1921.

Province or Territory.	Population in 1871.	Increase in each decade from 1871 to 1921.					Population in 1921.	Increase 1871 to 1921.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.		
Prince Edward I.....	94,021	14,870	187	—5,819	—9,531	—5,113	88,615	—5,406
Nova Scotia.....	387,800	52,772	9,824	9,178	32,764	31,499	523,837	136,037
New Brunswick.....	285,594	35,639	30	9,857	20,769	35,987	387,876	102,282
Quebec.....	1,191,516	167,511	129,508	160,363	356,878	355,423	2,361,199	1,169,683
Ontario.....	1,620,851	306,071	187,399	68,626	344,345	406,370	2,933,662	1,312,811
Manitoba.....	25,228	37,032	90,246	102,705	206,183	148,724	610,118	584,890
Saskatchewan.....	—	—	—	91,279	401,153	265,078	757,510	757,510
Alberta.....	—	—	—	73,022	301,273	214,159	588,454	588,454
British Columbia.....	36,247	13,212	48,714	80,484	213,823	132,102	524,582	488,335
Yukon Territory.....	—	—	—	27,219	—18,707	—4,355	4,157	4,157
Northwest Territories <sup>1</sup> .....	48,000	8,446	42,521	—78,838	—13,622	1,481	7,988	—40,012
Royal Canadian Navy.....	—	—	—	—	—	485	485	485
<b>Canada.....</b>	<b>3,689,257</b>	<b>635,553</b>	<b>508,429</b>	<b>538,076</b>	<b>1,835,328</b>	<b>1,581,840</b>	<b>8,788,483</b>	<b>5,099,226</b>

<sup>1</sup> The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of immense areas to form the provinces of Alberta and Saskatchewan and the Yukon Territory, as well as to extend the boundaries of the older provinces of Quebec, Ontario and Manitoba.

6.—Population of Canada by Provinces and Territories in 1871, and increase per cent by decades from 1871 to 1921.

Province or Territory.	Population in 1871.	Per cent increase by decades from 1871 to 1921.					Per cent increase in 50 years.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	
Prince Edward Island.....	94,021	15.82	0.17	-5.33	-9.23	-5.46	-5.75
Nova Scotia.....	387,800	13.61	2.23	2.04	7.13	6.40	35.08
New Brunswick.....	285,594	12.48	0.01	3.07	6.27	10.23	35.82
Quebec.....	1,191,516	14.06	9.53	-0.77	21.64	17.72	98.17
Ontario.....	1,620,851	18.88	9.73	3.25	15.77	16.08	80.99
Manitoba.....	25,228	146.79	144.95	67.34	80.79	32.23	2,318.42
Saskatchewan.....	—	—	—	—	439.48	53.83	—
Alberta.....	—	—	—	—	412.58	57.22	—
British Columbia.....	36,247	36.45	98.49	81.98	119.68	33.66	1,347.24
Yukon Territory.....	—	—	—	—	-68.73	-51.16	—
Northwest Territories <sup>1</sup> .....	48,000	17.60	75.33	79.66	-67.67	22.76	-83.36
<b>Canada.....</b>	<b>3,889,257</b>	<b>17.23</b>	<b>11.76</b>	<b>11.13</b>	<b>34.17</b>	<b>21.95</b>	<b>138.22</b>

**Rural and Urban Population.**—In Table 7 are given statistics showing the growth of rural and urban population respectively since 1891. For the purposes of the census, the population residing in cities, towns and incorporated villages has been defined as urban, and that outside of such localities as rural. Thus the distinction here made between "rural" and "urban" population is a distinction of provincial legal status rather than of size of aggregations of population within limited areas. Since the laws of the various provinces differ in regard to the population necessary before a municipality may be incorporated as urban, (the laws of Saskatchewan, for example, making provision that 50 people actually resident on an area not greater than 640 acres may claim incorporation as a village, while the Ontario law now requires that villages asking for incorporation shall have a population of 750 on an area not exceeding 500 acres), the line of demarcation between rural and urban population is not uniformly drawn throughout the Dominion, as far as comparable aggregations of population are concerned. To a limited extent, however, Table 9 will permit the student of population statistics to make, at least for Canada as a whole, his own line of demarcation between rural and urban population.<sup>2</sup>

While a summary comparison between urbanization in Canada in 1921 and in the United States in 1920 would lead us to the conclusion that our country, though far less densely peopled than the United States, had an almost equally large percentage of its population in urban communities, viz., 49.52 per cent in Canada as compared

<sup>1</sup> The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of immense areas to form the provinces of Alberta and Saskatchewan and the Yukon Territory, as well as to extend the boundaries of the older provinces of Quebec, Ontario and Manitoba.

<sup>2</sup> In the United States, urban population is classified by the Census Bureau as that residing in cities and other incorporated places having 2,500 inhabitants or more, and in "towns" having 2,500 inhabitants or more in Massachusetts, New Hampshire and Rhode Island. While such "towns," under the forms of local government existing in these states, are partly rural in character, the United States Census Bureau considers that the total urban population of these states is not greatly exaggerated thereby.



with 51.4 per cent in the United States, the fact that in the United States inhabitants of places having under 2,500 population are included with rural population, while in Canada the inhabitants of many places with less than 100 population are classed as urban, must be taken into account. A fairer basis of comparison is secured if the same population limits are taken for both countries, as may be done by using Table 9. Thus, at the census of 1920 the United States had 25.9 per cent of its population resident in cities of 100,000 and over, while Canada in 1921 had only 18.87 per cent of its population in such places. The United States had an additional 16.4 per cent of its population residing in cities of between 10,000 and 100,000 population, and 4.7 per cent in cities and towns of 5,000 to 10,000, while Canada had in cities of these categories only 13.32 per cent, and 4.36 per cent respectively of its population. Thus, taking all places of 5,000 and over—the lowest population for which comparative figures are readily available—47 per cent of the population of the United States resided in such places as compared with 36.55 per cent of the population of Canada, showing the much higher degree of urbanization which has been reached in the United States—a natural thing in an older settled and more densely peopled country.

On the basis of the census classification, it is apparent from Table 7 that in the last decade, as in the previous one, urban communities absorbed somewhat over two-thirds of the total increase in population, with the result that the urban population of Canada was in 1921 nearly equal to the rural. Out of every 1,000 persons in the country 505 were resident, on June 1, 1921, in rural and 495 in urban communities, as compared with 545 in rural and 455 in urban communities on June 1, 1911, 625 in rural and 375 in urban communities in 1901, and 682 in rural and 318 in urban communities in 1891.

From Table 9, showing the distribution of urban population in Canada by size of cities and towns, it becomes evident that for the first time in its census history Canada possesses cities of more than half a million population. These are Montreal and Toronto, with 618,506 and 521,893 inhabitants respectively, the former having in its neighbourhood several "satellite" cities, Verdun, Westmount, Lachine, Outremont, which, with other smaller towns in its vicinity, bring the population of "Greater Montreal" to the 700,000 mark. No other city has attained the 200,000 mark, but during the past decade Hamilton and Ottawa have been added to Winnipeg and Vancouver as cities of over 100,000 population, while Quebec, which in 1911 was, together with Hamilton and Ottawa, in the 50,000 to 100,000 class, has been joined in that class, though at a considerable interval, by Calgary, London, Edmonton and Halifax. Details of the population of these and other smaller cities and towns of 5,000 and over, are given by censuses from 1871 to 1921 in Table 11, while the populations of urban communities having a population of from 1,000 to 5,000 are given for 1901, 1911 and 1921 in Table 12.

7.—Rural and Urban Population by Provinces and Territories, 1891, 1901, 1911 and 1921.

Provinces.	1891.		1901.		1911.		1921.		Numerical Increase in decade 1911-21.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.		
Prince Edward Island.....	94,823	14,255	88,304	14,955	78,758	14,970	69,522	19,093	-9,236	4,123
Nova Scotia.....	373,403	76,993	330,191	129,383	306,210	186,128	296,799 <sup>6</sup>	227,038 <sup>6</sup>	-9,411	40,910
New Brunswick.....	272,362	48,901	253,835	77,285	252,342	99,547	263,432 <sup>5</sup>	124,444 <sup>5</sup>	11,090	24,897
Quebec.....	988,820	499,715	994,833 <sup>8</sup>	654,065 <sup>8</sup>	1,038,934 <sup>8</sup>	966,842 <sup>8</sup>	1,038,630	1,322,569	-304	355,727
Ontario.....	1,295,323	818,998	1,246,969	935,978	1,198,803 <sup>7</sup>	1,328,489	1,226,379	1,707,283	27,576	378,794
Manitoba.....	111,498	41,008	184,775 <sup>3</sup>	70,436 <sup>3</sup>	261,029 <sup>4</sup>	200,365	348,502	261,616	87,473	61,251
Saskatchewan.....	-1	-	77,013 <sup>9</sup>	14,266 <sup>9</sup>	361,037 <sup>9</sup>	131,395 <sup>9</sup>	538,552	218,958	177,515	87,563
Alberta.....	-1	-	54,489 <sup>2</sup>	18,533 <sup>2</sup>	236,633 <sup>2</sup>	137,662 <sup>2</sup>	365,550	222,904	128,917	85,242
British Columbia.....	60,945	37,228	88,478	90,179	188,796	203,684	277,020	247,562	88,224	43,878
Yukon Territory.....	-1	-	18,077	9,142	4,647	3,865	3,182	975	-1,465	-2,890
Northwest Territories.....	-1	-	20,129	-	6,507 <sup>10</sup>	-	7,988	-	1,481	-
Royal Canadian Navy.....	-	-	-	-	-	-	485	-	485	-
Canada	3,296,141	1,537,098	3,357,093	2,014,222	3,933,696	3,272,947	4,436,041	4,352,442	502,345	1,079,495

<sup>1</sup> The population (98,967) in territory now comprised in the provinces of Alberta, Saskatchewan and in the Yukon and Northwest Territories was classified as rural in the Census of 1891. <sup>2</sup> Volume 1, Census 1911, places the urban population of Alberta for that year at 141,337. Included in this figure was the population (5,250) of twelve places which, according to the Report of the Municipal Commissioner for Alberta, were not then incorporated. The places so included were Aetna, Bankhead, Bellevue, Bickerdike, Cannore, Cardiff, Exshaw, Hillebert, Jessburg, Quenston and Elmpark. The correction resulting from this and from other small adjustments consequent upon more definite knowledge as to incorporated areas places the urban population for 1911 at 137,662. Similar corrections have been made in the urban and rural figures for the Census of 1901. <sup>3</sup> As corrected in Census Report, Prairie Provinces, 1916. <sup>4</sup> As changed by Extension of Boundaries Act, 1912. <sup>5</sup> Corrected by information received, since Bulletin 1 was printed, which transferred population of Shediac and Hampton to urban column and population of Salisbury to rural. <sup>6</sup> Corrected by information received, since Bulletin 2 was printed, giving Clark's Harbour as an incorporated town. <sup>7</sup> As changed by Extension of Boundaries Act, 1912. <sup>8</sup> The urban population of 970,791 shown in Volume 1, Census 1911, is reduced to 966,842 by the transfer of the population of Manitowick, Martinville, Moisie, St. Bruno, St. Martin and St. Vincent de Paul from urban to rural; by adjustments in area of the villages of Ste. Anne and Ste. Genevieve; and Extension of Boundaries Act, 1912. <sup>9</sup> Urban and rural population for 1911 and 1901 are as corrected in Census Report, Prairie Provinces, 1916. <sup>10</sup> As reduced by Extension of Boundaries Act, 1912.

8.—Percentage Distribution of Rural and Urban Population by Provinces and Territories, 1891, 1901, 1911 and 1921.

Provinces.	1891.		1901.		1911.		1921.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
P. E. Island.....	86.93	13.07	85.52	14.48	84.03	15.97	78.45	21.55
Nova Scotia.....	82.91	17.09	71.85	28.15	62.20	37.80	56.66	43.34
New Brunswick.....	84.78	15.22	76.66	23.34	71.71	28.29	67.92	32.08
Quebec.....	66.43	33.57	60.33	39.67	51.80	48.20	43.99	56.01
Ontario.....	61.26	38.74	57.12	42.88	47.43	52.57	41.80	58.20
Manitoba.....	73.11	26.89	72.40	27.60	56.57	43.43	57.12	42.88
Saskatchewan.....	1	-	84.37	15.63	73.32	26.68	71.10	28.90
Alberta.....	1	-	74.62	25.38	63.22	36.78	62.12	37.88
British Columbia.....	62.08	37.92	49.52	50.48	48.10	51.90	52.81	47.19
Yukon Territory.....	1	-	66.41	33.59	54.59	45.41	76.55	23.45
N.W. Territories.....	1	-	100.00	-	100.00	-	100.00	-
Royal Canadian Navy.....	-	-	-	-	-	-	100.00	-
<b>Canada.....</b>	<b>68.20</b>	<b>31.80</b>	<b>52.50</b>	<b>37.50</b>	<b>54.58</b>	<b>45.42</b>	<b>50.48</b>	<b>49.52</b>

NORE.—In using this table, reference should be made to the notes appended to the preceding table showing rural and urban population by numbers.

<sup>1</sup> The population in the territory now comprised in the Provinces of Alberta and Saskatchewan, and the Yukon and Northwest Territories was classified as rural in the census of 1891.

9.—Urban Population of Canada, divided by Size of Municipality Groups, 1901, 1911 and 1921.

In Cities and Towns of	1901.				1911.				1921.			
	Num- ber of Places.	Popu- lation.	Per cent of		Num- ber of Places.	Popu- lation.	Per cent of		Num- ber of Places.	Popu- lation.	Per cent of	
			Urban Pop.	Total Pop.			Urban Pop.	Total Pop.			Urban Pop.	Total Pop.
Over 500,000.....	-	-	-	-	-	-	-	-	2	1 140,399	26.20	12.97
Over 400,000.....	-	-	-	-	1	470,480	14.94	6.53	-	-	-	-
Between—												
300,000 and 400,000.....	-	-	-	-	1	376,538	11.48	5.22	-	-	-	-
200,000 and 300,000.....	2	475,770	23.53	8.86	-	-	-	-	-	-	-	-
100,000 and 200,000.....	-	-	-	-	2	236,436	7.21	3.28	4	518,298	11.91	5.90
50,000 and 100,000.....	3	181,402	8.97	3.38	3	247,741	7.55	3.44	5	336,650	7.74	3.83
25,000 and 50,000.....	5	188,869	9.34	3.52	6	241,007	7.35	3.34	7	239,096	5.49	2.72
15,000 and 25,000.....	3	55,499	2.75	1.03	13	237,551	7.24	3.30	19	370,990	8.52	4.22
10,000 and 15,000.....	8	95,266	4.71	1.77	18	221,322	6.74	3.07	18	224,033	5.15	2.55
5,000 and 10,000.....	37	275,919	13.65	5.14	46	323,056	9.85	4.48	54	382,762	8.79	4.36
3,000 and 5,000.....	50	190,789	9.44	3.55	60	226,212	6.89	3.14	73	276,026	6.34	3.14
1,000 and 3,000.....	187	320,433	15.85	5.97	251	429,553	13.09	5.07	292	489,461	11.25	5.57
500 and 1,000.....	179	130,238	6.44	2.42	247	180,784	5.51	2.51	-	-	8.61	4.26
Under 500.....	-	107,614	5.32	2.00	-	90,284	2.75	1.25	-	-	-	-
Total.....	-	2,021,799	100.00	37.64	-	3,280,961	100.00	45.53	-	4,352,402	100.00	49.52



# 10.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901.

Provinces and Districts.	Land area in sq. miles.	Population 1921.		1911.	1901.	Increase (+) or Decrease (—).	
		Total.	Per sq. mile.			1921 over 1911.	1911 over 1901.
<b>Prince Edward Island</b> .....	<b>2,181.36</b>	<b>88,615</b>	<b>40.56</b>	<b>93,728</b>	<b>103,259</b>	<b>-5,113</b>	<b>-9,531</b>
Kings.....	641.18	20,445	31.88	22,636	24,725	-2,191	-2,089
Prince.....	778.23	31,520	40.50	32,779	35,400	-1,259	-2,621
Queens.....	764.95	36,650	47.91	38,313	43,134	-1,663	-4,821
<b>Nova Scotia</b> .....	<b>21,068.00</b>	<b>523,837</b>	<b>24.86</b>	<b>492,338</b>	<b>459,574</b>	<b>31,499</b>	<b>32,764</b>
Antigonish and Guysborough.....	2,212.00	27,098	12.25	29,010	31,937	-1,912	-2,927
Antigonish.....	556.00	11,580	20.82	11,962	13,617	-382	-1,655
Guysborough.....	1,656.00	15,518	9.37	17,048	18,320	-1,530	-1,272
Cape Breton North and Victoria.....	1,355.10	31,325	23.11	29,888	24,650	1,437	5,238
Cape Breton North.....	250.34	22,511	89.92	19,978	14,079	2,533	5,899
Victoria.....	1,104.76	8,814	7.97	9,910	10,571	-1,096	-661
Cape Breton South and Richmond.....	1,210.90	76,362	63.06	66,625	48,602	9,737	18,023
Cape Breton South.....	721.90	63,785	88.35	53,352	35,087	10,433	18,265
Richmond.....	489.00	12,577	25.71	13,273	13,515	-696	-242
Colchester.....	1,451.00	25,196	17.36	23,664	24,900	1,532	-1,236
Cumberland.....	1,683.00	41,191	24.47	40,543	36,168	648	4,375
Digby and Annapolis.....	1,983.65	28,965	14.60	29,871	30,579	-906	-708
Digby Co. (part).....	659.77	10,812	16.38	11,290	11,737	-478	-447
Annapolis.....	1,323.88	18,153	13.71	18,581	18,842	-428	-261
Halifax City and County.....	2,123.38	97,228	45.78	80,257	74,662	16,971	5,595
Halifax City.....	6.72	58,372	8,686.31	46,619	40,832	11,753	5,787
Halifax County.....	2,116.66	38,856	18.36	33,638	33,830	5,218	-192
Hants.....	1,229.00	19,739	16.06	19,703	20,056	-36	-353
Inverness.....	1,408.75	23,808	16.90	25,571	24,353	-1,763	1,218
Kings.....	864.00	23,723	27.45	21,780	21,937	1,943	-157
Lunenburg.....	1,202.00	33,742	28.07	33,260	32,389	482	871
Pictou.....	1,124.00	40,851	36.34	35,858	33,459	4,993	2,399
Shelburne and Queens.....	2,022.48	23,435	11.58	24,211	24,428	-776	-217
Shelburne.....	1,009.43	13,491	13.36	14,105	14,202	-614	-97
Queens.....	1,013.05	9,944	9.81	10,106	10,226	-162	-120
Yarmouth and Clare.....	1,198.99	31,174	26.00	32,097	31,454	-923	643
Yarmouth.....	858.76	22,374	26.05	23,220	22,869	-846	351
Clare (Digby Co. part).....	340.23	8,800	25.86	8,877	8,585	-77	292
<b>New Brunswick</b> .....	<b>27,911.00</b>	<b>387,876</b>	<b>13.90</b>	<b>351,889</b>	<b>331,120</b>	<b>35,987</b>	<b>20,769</b>
Charlotte.....	1,283.40	21,435	16.70	21,147	22,415	-288	-1,268
Gloucester.....	1,869.81	38,684	20.68	32,662	27,936	6,022	4,726
Kent.....	1,778.02	23,916	13.45	24,376	28,958	-460	418
Northumberland.....	4,740.60	33,985	7.16	31,194	28,543	2,791	2,651
Restigouche and Madawaska.....	4,542.56	42,977	9.46	32,365	22,897	10,612	9,468
Restigouche.....	3,269.68	22,839	6.98	15,687	10,586	7,152	5,101
Madawaska.....	1,272.88	20,138	15.82	16,678	12,311	3,460	4,367
Royal.....	2,855.53	32,078	11.23	31,491	32,832	-587	-1,341
Kings.....	1,414.73	20,399	14.42	20,594	21,655	-195	-1,061
Queens.....	1,440.80	11,679	8.11	10,897	11,177	-782	-280
St. John City, County and Albert.....	1,302.88	69,093	53.03	63,263	62,684	5,830	579
St. John City.....	14.31	47,166	3,296.01	42,511	40,711	4,655	1,800
St. John County.....	601.57	13,320	22.14	11,061	11,048	2,259	13
Albert County.....	687.00	8,607	12.52	9,691	10,925	-1,084	-1,234
Victoria and Carleton.....	3,402.64	33,900	9.96	32,990	30,446	910	2,544
Victoria.....	2,092.04	12,800	6.12	11,544	8,895	1,256	2,719
Carleton.....	1,310.60	21,100	16.09	21,446	21,621	-346	-175
Westmorland.....	1,442.18	53,387	37.02	44,621	42,060	8,766	2,561
York and Sunbury.....	4,693.74	38,421	8.18	37,780	37,349	641	431
York.....	3,605.26	32,259	8.94	31,561	31,620	698	-59
Sunbury.....	1,088.48	6,162	5.66	6,219	5,729	-57	490

NOTE.—The land areas here given for the provinces and electoral districts are as measured by a planimeter on the map, and include the areas of small lakes and other waters which have not been measured.

<sup>1</sup> By map measurement.

10.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901.—continued.

Electoral Districts.	Land area in square miles.	Population 1921.		1911.	1901.	Increase (+) or Decrease (—).	
		Total.	Per square mile.			1921 over 1911.	1911 over 1901.
Quebec	690,865-00 <sup>1</sup>	2,361,199	3-42	2,005,776	1,648,898	355,423	356,878
Argenteuil	783-36	17,165	21-91	16,766	16,407	399	359
Bagot	346-14	18,035	52-10	18,206	18,181	-171	25
Beauce	1,891-04	53,841	28-47	51,399	43,129	2,442	8,270
Beauharnois	147-03	19,888	135-26	20,802	21,732	-914	-930
Bellechasse	652-64	21,190	32-47	21,141	18,706	49	2,435
Berthier	2,192-74	19,817	9-04	19,872	19,980	-55	-108
Bonaventure	3,463-61	29,092	8-40	28,110	24,495	982	3,615
Brome	488-15	13,471	27-60	13,216	13,397	255	-181
Chambly and Verchères	337-00	34,643	102-80	28,715	24,318	5,028	4,397
Champlain	1,497-95	48,009	32-05	39,824	32,015	8,185	7,809
Charlevoix-Montmorency	4,303-09	28,874	6-71	27,972	25,813	902	2,159
Châteauguay-Huntingdon	626-52	26,731	42-67	26,562	27,562	169	-1,000
Chicoutimi-Saguenay	492,140-74 <sup>2</sup>	90,609	0-18	65,888	48,291	24,721	17,597
Compton	1,439-04	32,285	22-44	29,630	26,460	2,655	3,170
Dorchester	941-60	28,954	30-75	25,096	21,007	3,858	4,089
Drummond & Arthabaska	1,197-82	44,823	37-42	41,590	38,999	3,233	2,591
Gaspé	4,551-47	40,375	8-87	35,001	30,683	5,374	4,318
George-Etienne Cartier	—	54,800	—	51,937	53,673	2,863	-1,736
Hochelega	—	73,526	—	44,884	14,193	28,642	30,691
Hull	1,023-18	43,541	42-55	37,917	33,851	5,624	4,066
Jacques Cartier	86-94	89,297	1,027-11	56,855	21,966	32,442	34,889
Joliette	3,013-50	25,913	8-60	23,911	22,255	2,002	1,656
Kamouraska	1,037-50	22,014	21-22	20,888	19,099	1,126	1,789
Labelle	2,948-80	35,927	12-18	30,115	22,291	5,812	7,824
Laprairie and Napierville	319-20	20,065	62-86	19,335	19,633	730	-298
L'Assomption-Montcalm	4,448-40	28,318	6-37	25,506	26,996	-188	1,510
Laurier-Outremont	—	72,047	—	44,264	13,237	27,783	31,027
Laval-Two Mountains	378-12	28,314	74-88	25,275	24,686	3,039	589
Lévis	271-83	33,323	122-59	28,913	26,210	4,410	2,703
L'Islet	772-80	17,859	23-11	16,435	14,439	1,424	1,996
Lotbinière	726-40	21,837	30-06	22,158	20,039	-321	2,119
Maisonneuve	58-10	64,933	1,117-61	33,796	12,402	31,137	21,394
Maskinongé	2,940-00	16,945	5-76	16,509	15,813	436	696
Matane	3,495-67	36,303	10-39	27,539	18,521	8,764	9,018
Mégantic	780-16	33,633	43-11	31,314	23,878	2,319	7,436
Missisquoi	375-21	17,709	47-20	17,466	17,339	243	127
Montmagny	630-13	21,997	34-91	17,356	14,757	4,641	2,599
Nicolet	626-07	29,695	47-43	30,055	27,209	-360	2,846
Pontiac	126,437-19 <sup>3</sup>	46,201	0-36	31,479	28,127	14,722	3,352
Portneuf	6,722-91	34,452	5-12	30,260	24,176	4,192	6,084
Quebec County	2,799-59	31,130	11-12	28,046	24,381	3,084	3,665
Quebec East	2-20	38,330	17,422-73	30,922	28,645	7,408	2,277
Quebec South	3-59	27,706	7,717-55	24,163	21,833	3,543	2,330
Quebec West	116-66	37,993	325-67	30,506	24,897	7,487	5,609
Richelieu	193-10	18,764	97-17	19,810	18,576	-1,046	1,234
Richmond and Wolfe	1,224-32	42,248	34-51	39,491	34,137	2,757	5,354
Rimouski	2,089-44	27,520	13-17	23,951	21,636	3,569	2,315
St. Ann	—	52,049	—	41,541	41,225	10,508	316
St. Antoine	—	32,394	—	34,794	47,653	-2,400	-12,859
St. Denis	—	78,020	—	45,141	10,391	33,779	34,750
St. Hyacinthe-Rouville	520-58	36,754	70-60	35,473	34,950	1,281	523
St. James	—	42,443	—	44,057	42,618	-1,614	1,439
St. Johns and Iberville	403-02	23,518	58-35	21,882	20,679	1,636	1,203
St. Lawrence-St. George	—	36,912	—	38,883	21,889	-1,971	16,994
St. Mary	—	63,975	—	62,521	40,631	1,454	21,890
Shefford	567-20	25,644	45-21	23,976	23,028	1,668	848
Sherbrooke	237-59	30,786	129-58	23,211	18,426	7,575	4,785
Stanstead	432-47	23,380	54-06	20,765	18,998	2,615	1,767
Témiscouata	1,806-18	44,310	24-53	36,430	29,185	7,880	7,245
Terrebonne	781-82	33,908	43-37	29,018	26,816	4,890	2,202
Three Rivers and St. Maurice	2,568-05	50,845	19-80	36,153	29,311	14,692	6,842
Vaudreuil-Soulanges	336-75	21,620	64-20	20,439	20,373	1,181	66
Westmount-St. Henri	—	62,909	—	56,088	40,960	6,821	15,128
Wright	2,297-27	21,850	9-51	21,171	19,589	679	1,582
Yamaska	393-12	18,840	47-92	20,387	21,506	-1,547	-1,119

<sup>1</sup> By map measurement.<sup>2</sup> Includes part added by Extension of Boundaries Act, 1912.<sup>3</sup> Includes un-

organized parts.

**10.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901.—continued.**

Electoral Districts.	Land area in sq. miles.	Population, 1921.		1911.	1901.	Increase (+) or Decrease (—).	
		Total.	Per sq. mile.			1921 over 1911.	1911 over 1901.
<b>Ontario.....</b>	<b>365,850-00<sup>1</sup></b>	<b>2,933,662</b>	<b>8-02</b>	<b>2,527,292</b>	<b>2,182,947</b>	<b>406,370</b>	<b>344,345</b>
Algoma East.....	20,678-17	40,618	1-96	37,699	25,211	2,919	12,488
Algoma West.....	22,153-08	33,676	1-52	28,752	17,894	4,924	10,858
Brant.....	334-23	20,085	60-09	19,259	18,273	826	986
Brantford.....	86-86	33,292	383-28	26,617	19,867	6,675	6,750
Bruce North.....	950-95	20,872	21-95	23,783	27,424	-2,911	-3,641
Bruce South.....	699-46	23,413	33-47	26,249	31,596	-2,836	-5,347
Carleton.....	650-87	32,673	50-19	24,417	22,880	8,256	1,537
Dufferin.....	556-64	15,415	27-69	17,740	21,036	-2,325	-3,296
Dundas.....	576-11	24,388	42-33	25,973	28,350	-1,585	-2,377
Durham.....	628-98	24,629	39-16	26,411	27,570	-1,782	-1,159
Elgin East.....	362-52	17,306	47-74	17,597	17,901	-291	-304
Elgin West.....	357-58	27,678	77-40	26,715	25,685	963	1,030
Essex North.....	239-27	71,150	297-36	38,006	28,789	33,144	9,217
Essex South.....	467-53	31,425	67-21	29,541	29,955	1,884	-414
Fort William and Rainy River.....	12,784-68	39,661	3-10	32,158	18,461	7,503	13,697
Frontenac.....	1,595-91	20,390	12-77	21,944	24,746	-1,554	-2,802
Glenora and Stormont.....	697-33	38,573	55-31	38,226	40,580	347	-2,354
Greenville.....	462-83	16,644	35-96	17,545	21,021	-901	-3,476
Grey North.....	669-79	30,667	45-78	33,957	33,003	-3,290	954
Grey Southeast.....	1,038-03	28,334	27-34	31,934	36,587	-3,550	-4,653
Haldimand.....	488-13	21,287	43-60	21,562	21,233	-275	329
Halton.....	362-69	24,899	68-65	22,208	19,545	2,691	2,663
Hamilton East.....	2-69	49,820	18,520-44	59,793	24,000	10,027	15,793
Hamilton West.....	3-54	39,298	11,101-11	37,279	28,634	2,019	8,645
Hastings East.....	1,291-41	23,072	17-86	24,978	27,943	-1,906	-2,965
Hastings West.....	1,031-57	34,451	33-39	30,825	31,348	3,626	-523
Huron North.....	660-11	23,540	35-66	26,886	30,966	-3,346	-4,080
Huron South.....	635-31	23,548	37-06	26,097	30,854	-2,549	-4,757
Kent.....	818-50	52,139	63-70	49,391	49,673	2,748	-882
Kingston.....	3-54	24,104	6,809-03	20,660	19,788	3,444	282
Lambton East.....	647-81	25,801	39-82	28,827	34,440	-3,026	-5,613
Lambton West.....	575-57	32,888	57-13	29,109	29,723	3,779	-614
Lincoln.....	1,127-99	32,993	28-99	34,375	37,232	-1,382	-2,857
Leeds.....	899-68	34,909	38-80	36,753	37,975	-1,844	-1,222
Lennox and Addington.....	1,159-77	18,994	16-23	20,386	23,346	-1,392	-2,960
Lincoln.....	332-41	48,625	146-28	35,429	30,552	13,196	4,877
London.....	6-65	53,838	8,095-94	48,300	37,976	7,538	8,324
Middlesex East.....	481-00	27,994	58-18	23,465	23,339	4,529	126
Middlesex West.....	752-14	25,033	33-28	27,300	31,837	-2,267	-4,087
Muskoka.....	1,585-38	19,439	12-26	21,233	20,971	-1,794	262
Nipissing.....	11,157-32	58,565	5-25	43,679	24,931	14,886	18,745
Norfolk.....	634-26	26,366	41-56	27,110	29,147	-744	-2,037
Northumberland.....	704-29	30,512	43-32	32,892	33,550	-2,380	-658
Ontario North.....	504-82	15,420	30-54	17,141	18,390	-1,721	-1,249
Ontario South.....	347-69	31,074	89-37	23,865	22,018	7,209	1,847
Ottawa.....	4-75	93,740	19,734-74	77,182	59,140	16,558	18,042
Oxford North.....	410-56	24,527	59-74	25,077	25,644	-557	-567
Oxford South.....	353-99	22,235	62-81	22,294	22,760	-59	-466
Parkdale.....	-	80,780	-	59,609	22,303	21,171	37,306
Perry Sound.....	4,336-00	27,022	6-23	26,547	24,936	475	1,611
Peel.....	468-51	23,896	51-01	22,102	21,475	1,794	627
Perth North.....	429-77	32,461	75-53	30,235	29,266	2,226	979
Perth South.....	409-81	18,382	44-85	18,947	20,615	-565	-1,668
Peterborough East.....	891-38	13,716	15-38	15,499	16,291	-1,783	-792
Peterborough West.....	553-81	29,313	52-93	26,151	20,704	3,167	5,447
Port Arthur and Kenora.....	207,570-90	43,300	-21	39,109	10,526	4,191	28,583
Prescott.....	494-29	26,478	53-56	26,968	27,035	-490	-67
Prince Edward.....	390-40	16,806	43-04	17,150	17,864	-344	-714
Renfrew North.....	1,057-81	23,956	22-64	23,617	24,556	339	-939
Renfrew South.....	1,644-95	27,061	16-45	27,852	27,676	-791	176
Russell.....	698-68	43,413	62-13	39,434	35,166	3,979	4,263
Simcoe East.....	529-39	37,122	70-12	35,294	29,845	1,828	5,449
Simcoe North.....	574-88	22,100	38-44	24,699	26,071	-2,599	-1,372
Simcoe South.....	558-61	24,810	44-41	25,060	26,399	-250	-1,339

<sup>1</sup> By map measurement.

10.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901.—continued.

Electoral Districts.	Land area in sq. miles.	Population, 1921.		1911.	1901.	Increase (+) or Decrease (—).	
		Total.	Per sq. mile.			1921 over 1911.	1911 over 1901.
<b>Ontario—concluded—</b>							
Timiskaming.....	46,211·00	51,568	1·11	37,380	3,378	14,188	34,002
Toronto Centre.....	—	51,768	—	54,792	45,888	—3,024	8,904
Toronto East.....	—	64,825	—	53,712	36,763	11,113	16,949
Toronto North.....	—	72,478	—	51,318	20,766	21,160	30,552
Toronto South.....	—	37,596	—	43,956	38,108	—6,360	5,848
Toronto West.....	—	68,397	—	57,804	41,069	10,593	16,735
Victoria.....	2,834·23	33,995	11·99	36,496	38,511	—2,504	—2,012
Waterloo North.....	273·20	41,698	152·62	33,619	27,124	8,079	6,495
Waterloo South.....	242·63	33,568	138·35	28,988	25,470	4,580	3,518
Welland.....	387·27	66,668	172·14	42,163	31,588	24,505	10,575
Wellington North.....	580·46	19,333	34·16	22,292	26,120	—2,459	—3,828
Wellington South.....	438·88	34,327	78·21	32,200	29,526	2,127	2,674
Wentworth.....	451·97	64,449	142·59	34,634	26,818	29,815	7,816
York East.....	64·52	77,950	1,208·15	32,864	8,478	45,086	24,386
York North.....	430·56	23,136	53·73	22,415	22,419	721	—4
York South.....	202·28	100,054	494·63	31,933	18,964	68,121	12,969
York West.....	158·52	70,681	445·88	35,831	17,905	34,850	17,926
<b>Manitoba.....</b>	<b>231,926·00<sup>1</sup></b>	<b>610,118</b>	<b>2·63</b>	<b>431,394</b>	<b>255,211</b>	<b>148,724</b>	<b>206,183</b>
Brandon.....	2,914·06	40,183	13·78	39,734	25,047	449	14,687
Dauphin.....	5,468·75	35,482	6·49	23,358	12,617	12,124	10,741
Lisgar.....	1,979·96	29,921	15·11	25,978	26,899	3,943	—921
Macdonald.....	2,390·90	23,824	9·96	20,802	17,324	3,022	3,478
Marquette.....	5,454·24	41,254	7·56	32,384	20,435	8,870	11,949
Neepawa.....	3,491·53	28,356	8·12	23,923	19,140	4,433	4,783
Nelson.....	173,975·18	19,806	0·11	11,737	2,359	8,069	9,378
Portage la Prairie.....	1,710·22	22,254	13·01	22,059	14,969	195	7,090
Provencher.....	4,261·36	29,308	6·87	24,276	14,129	5,032	10,147
Selkirk.....	10,689·84	55,395	5·18	32,653	16,443	22,742	16,210
Souris.....	3,586·35	26,410	7·36	27,133	22,634	—723	4,499
Springfield.....	15,944·15	58,870	3·69	37,247	20,290	21,623	16,957
Winnipeg Centre.....	59·46	76,470	3,347·71	58,903	—	17,567	—
Winnipeg North.....		62,957		45,682	42,925	17,275	—
Winnipeg South.....		59,628		35,525	—	24,103	—
<b>Saskatchewan.....</b>	<b>241,309·88<sup>1</sup></b>	<b>757,510</b>	<b>3·14</b>	<b>492,432</b>	<b>91,279</b>	<b>265,078</b>	<b>401,153</b>
Assiniboia.....	5,850·86	34,789	5·95	31,975	9,053	2,814	22,922
Battleford.....	6,651·96	33,641	5·06	21,667	1,355	11,974	20,312
Humboldt.....	8,320·95	55,225	6·63	36,617	1,652	18,608	34,965
Kindersley.....	11,264·30	44,772	3·97	22,299	31	22,473	22,268
Last Mountain.....	7,085·51	50,055	7·06	33,093	1,575	16,962	31,518
Mackenzie.....	5,856·34	55,629	9·49	36,940	11,984	18,689	24,956
Maple Creek.....	15,149·09	56,064	3·70	19,730	1,473	36,334	18,257
Moosejaw.....	5,591·12	50,403	9·01	31,552	3,725	18,851	27,827
North Battleford.....	72,000·00	47,381	0·66	24,330	4,579	23,051	19,751
Prince Albert.....	76,499·00	56,829	0·74	35,839	16,644	20,990	19,195
Qu'Appelle.....	4,458·06	34,836	7·81	30,470	17,133	4,366	13,337
Regina.....	2,063·25	49,977	24·22	44,202	6,581	5,775	37,621
Salteoats.....	4,554·69	43,795	9·62	32,313	10,874	11,482	21,439
Saskatoon.....	3,453·38	55,151	15·97	31,633	2,964	23,518	28,669
Swift Current.....	7,958·48	53,275	6·69	28,691	484	24,584	28,207
Weyburn.....	6,051·89	35,688	5·89	31,081	1,172	4,607	29,909
<b>Alberta.....</b>	<b>252,985·00<sup>1</sup></b>	<b>588,454</b>	<b>2·33</b>	<b>374,295</b>	<b>73,022</b>	<b>214,159</b>	<b>301,273</b>
Battle River.....	13,191·90	49,173	3·73	26,352	597	22,821	25,755
Bow River.....	11,259·86	55,356	4·92	27,304	1,565	28,052	25,739
Calgary East.....	2,033·59	44,995	22·13	35,163	5,526	9,832	29,637
Calgary West.....	4,630·00	44,341	9·58	30,023	3,546	14,318	26,477
Edmonton East.....	57,172·40	56,548	0·99	30,926	7,685	25,622	23,241
Edmonton West.....	112,497·43	74,267	0·66	35,386	7,641	38,881	27,745
Lethbridge.....	5,498·33	37,699	6·86	29,487	5,995	8,212	23,492
Macleod.....	9,017·00	34,008	3·77	30,779	8,228	3,229	22,551
Medicine Hat.....	12,497·00	43,179	3·46	24,697	3,185	18,482	21,512

<sup>1</sup> By map measurement.



# 10.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901.—concluded.

Electoral Districts.	Land area in sq. miles.	Population, 1921.		1911.	1901.	Increase (+) or Decrease (—).	
		Total.	Per square mile.			1921 over 1911.	1911 over 1901.
<b>Alberta—concluded—</b>							
Red Deer.....	13,431.84	49,629	3.69	37,507	7,568	12,122	29,939
Strathcona.....	5,309.09	42,520	8.01	28,355	12,635	14,165	15,720
Victoria.....	6,386.45	56,739	8.88	38,316	8,851	18,423	29,465
<b>British Columbia</b>	<b>353,416.00</b>	<b>524,582</b>	<b>1.48</b>	<b>392,480</b>	<b>178,657</b>	<b>132,102</b>	<b>213,823</b>
Burrard.....	620.79	69,922	112.63	48,493	1,267	21,429	47,226
Cariboo.....	164,693.50	39,834	0.24	26,541	29,155 <sup>2</sup>	13,293	—
Comox-Alberni.....	18,227.46	32,009	1.75	19,739	8,444	12,270	11,295
Fraser Valley.....	304.95	28,811	94.48	22,645	8,219	6,166	14,426
Kootenay East.....	13,367.11	19,137	1.43	22,466	8,446	—3,329	14,020
Kootenay West.....	12,979.11	30,502	2.35	28,373	23,516	2,129	4,857
Nanaimo.....	2,717.00	48,010	17.67	31,878	22,293	16,132	9,585
New Westminster.....	6,102.41	45,982	7.54	29,384	14,855	16,598	14,529
Skeena.....	123,896.14	28,934	0.23	22,685	13,013	6,249	9,672
Vancouver Centre.....	5.73	60,879	10,624.60	60,104	27,010	775	33,094
Vancouver South.....	32.24	46,137	1,431.04	20,446	1,520	25,691	18,926
Victoria.....	7.50	38,727	5,163.60	31,660	20,919	7,067	10,741
Yale.....	10,462.06	35,698	3.41	28,066	8	7,632	—

<sup>1</sup> By map measurement for provinces and electoral districts.

<sup>2</sup> Includes Yale District.    <sup>3</sup> Included in Cariboo District.

# 11.—Population of Cities and Towns having over 5,000 inhabitants in 1921, compared with 1871-81-91-1901-11.

NOTE.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (\*). In all cases the population is for the city or town municipality as it existed in 1921.

Cities and Towns.	Provinces.	Population.					
		1871.	1881.	1891.	1901.	1911.	1921.
*Montreal.....	Quebec.....	115,000	155,238	219,216	328,172	490,504 <sup>1</sup>	618,506
*Toronto.....	Ontario.....	59,000	96,196	181,215	209,892 <sup>2</sup>	381,833 <sup>2</sup>	521,893
*Winnipeg.....	Manitoba.....	241	7,985	25,639	42,340	136,035	179,087
*Vancouver.....	British Columbia.....	—	—	13,709	27,010	100,401	117,217
*Hamilton.....	Ontario.....	26,880	36,661	48,959	52,634	81,969	114,151
*Ottawa.....	".....	24,141	31,307	44,154	59,928	87,062	107,843
*Quebec.....	Quebec.....	59,699	62,446	63,090	68,840	78,710	95,193
*Calgary.....	Alberta.....	—	—	3,876	4,392	43,704	63,305
*London.....	Ontario.....	18,000	26,266	31,977	37,976	46,300	60,959
*Edmonton.....	Alberta.....	—	—	—	4,176	31,064 <sup>3</sup>	58,821
*Halifax.....	Nova Scotia.....	29,582	36,100	38,437	40,832	46,619	58,372
*St. John.....	New Brunswick.....	41,325	41,353	39,179	40,711	42,511	47,166
*Victoria.....	British Columbia.....	3,270	5,925	16,841	20,919	31,660	38,727
*Windsor.....	Ontario.....	4,253	6,561	10,322	12,153	17,829	38,591
*Regina.....	Saskatchewan.....	—	—	—	2,249	30,213	34,432
*Brantford.....	Ontario.....	8,107	9,616	12,753	16,619	23,132	29,440
*Saskatoon.....	Saskatchewan.....	—	—	—	113	12,004	25,739
Verdun.....	Quebec.....	—	—	296	1,898	11,629	25,001
*Hull.....	".....	3,800	6,890	11,264	13,993	18,222	24,117
*Sherbrooke.....	".....	4,432	7,227	10,110	11,765	16,405	23,515
*Sydney.....	Nova Scotia.....	—	1,480	2,427	9,909	17,723	22,545
Three Rivers.....	Quebec.....	7,570	8,670	8,334	9,981	13,691	22,367
*Kitchener.....	Ontario.....	2,743	4,054	7,425	9,747	15,196	21,763
*Kingston.....	".....	12,407	14,091	19,263	17,961	18,874	21,753
*Sault Ste. Marie.....	".....	879	780	2,414	7,169	14,920 <sup>4</sup>	21,092
*Peterborough.....	".....	4,611	6,812	9,717	12,886	18,360	20,994
*Fort William.....	".....	—	—	—	3,633	16,499	20,541
*St. Catharines.....	".....	7,864	9,631	9,170	9,946	12,484	19,881
*Moose Jaw.....	Saskatchewan.....	—	—	—	1,558	13,823	19,285
*Guelph.....	Ontario.....	6,878	9,890	10,537	11,496	15,175	18,128
Westmount.....	Quebec.....	200	884	3,076	8,856	14,579	17,593
*Moncton.....	New Brunswick.....	600	5,032	8,762	9,026	11,345	17,488
*Glace Bay.....	Nova Scotia.....	—	—	2,459	6,945	16,562	17,007
*Stratford.....	Ontario.....	4,313	8,239	9,500	9,959	12,946	16,094
*St. Thomas.....	".....	2,197	8,367	10,366	11,485	14,054	16,026
*Lachine.....	Quebec.....	1,696	2,406	3,761	6,365	11,688 <sup>5</sup>	15,404
*Brandon.....	Manitoba.....	—	—	3,778	5,620	13,339	15,397
*Port Arthur.....	Ontario.....	—	—	—	3,214	11,220	14,886
*Sarnia.....	".....	2,929	3,874	6,692	8,176	9,947	14,877
*Niagara Falls.....	".....	—	2,347	3,349	5,702	9,248	14,764

11.—Population of Cities and Towns having over 5,000 inhabitants in 1921, compared with 1871-81-91-1901-11.—concluded.

Cities and Towns.	Provinces.	Population.					
		1871.	1881.	1891.	1901.	1911.	1921.
*New Westminster.....	British Columbia...	—	1,500	6,678	6,499	13,199	14,495
*Chatham.....	Ontario.....	5,873	7,873	9,052	9,068	10,770	13,256
*Outremont.....	Quebec.....	—	387	795	1,148	4,820	13,249
*Galt.....	Ontario.....	3,827	5,187	7,535	7,866	10,299	13,216
*St. Boniface.....	Manitoba.....	—	1,283	1,553	2,019	7,483	12,821
*Charlottetown & Royalty	P. E. Island.....	8,807	11,485	11,373	12,080	11,203	12,347
*Belleville.....	Ontario.....	7,305	9,516	9,916	9,117	9,876	12,206
*Owen Sound.....	".....	3,369	4,426	7,497	8,776	12,558	12,190
*Oshawa.....	".....	3,185	3,992	4,066	4,394	7,436	11,940
*Lethbridge.....	Alberta.....	—	—	—	2,072	9,035	11,097
*St. Hyacinthe.....	Quebec.....	3,746	5,321	7,016	9,210	9,797	10,859
*North Bay.....	Ontario.....	—	—	—	2,530	7,737	10,692
*Shawinigan Falls.....	Quebec.....	—	—	—	2,768	4,265	10,625
*Lévis.....	Quebec.....	6,691	7,597	7,301	9,242	8,703 <sup>6</sup>	10,470
*Brockville.....	Ontario.....	5,102	7,609	8,791	8,940	9,374	10,043
*Amherst.....	Nova Scotia.....	—	2,274	3,781	4,964	8,973	9,908
*Woodstock.....	Ontario.....	3,982	5,373	8,612	8,833	9,320	9,935
*Medicine Hat.....	Alberta.....	—	—	—	1,570	5,608	9,634
*Valleyfield.....	Quebec.....	1,800	3,906	5,515	11,055	9,449	9,215
*Toliette.....	".....	3,047	3,268	3,347	4,220	6,346	9,113
*Nanaimo and suburbs	British Columbia.....	—	1,645	4,595	6,130	8,306	9,088
*New Glasgow.....	Nova Scotia.....	—	2,595	3,776	4,447	6,333	8,974
*Chicoutimi.....	Quebec.....	1,393	1,935	2,277	3,826	5,880	8,937
*Orillia.....	Ontario.....	1,322	2,911	4,752	4,907	6,828	8,774
*Welland.....	".....	1,110	1,870	2,035	1,863	5,318	8,654
*Sudbury.....	".....	—	—	—	2,027	4,150	8,621
*Sydney Mines.....	Nova Scotia.....	—	2,340	2,442	3,191	7,470	8,327
*Sorel.....	Quebec.....	5,636	5,791	6,669	7,057	8,420	8,174
*Fredericton.....	New Brunswick.....	6,006	6,218	6,502	7,117	7,208	8,114
*Dartmouth.....	Nova Scotia.....	—	3,786	6,252	4,806	5,058	7,899
*Theftford Mines.....	Quebec.....	—	—	—	3,256	7,261	7,886
*Pembroke.....	Ontario.....	1,508	2,820	4,401	5,156	6,626	7,875
*St. Johns.....	Quebec.....	3,022	4,314	4,722	4,030	5,903	7,734
*Rivière du Loup.....	".....	1,541	2,291	4,175	4,569	6,774	7,703
*North Vancouver.....	British Columbia.....	—	—	—	—	8,196 <sup>7</sup>	7,652
*Grand Mère.....	Quebec.....	—	—	—	2,511	4,783	7,631
*Lindsay.....	Ontario.....	4,049	5,080	6,081	7,003	6,964	7,620
*Truro.....	Nova Scotia.....	—	3,461	5,102	5,993	6,107	7,562
*Prince Albert.....	Saskatchewan.....	—	—	—	1,785	6,254	7,558
*Cornwall.....	Ontario.....	2,033	4,468	6,805	6,704	6,598	7,419
*Yarmouth.....	Nova Scotia.....	2,500	3,485	6,089	6,430	6,600	7,073
*Walkerville.....	Ontario.....	—	933	1,595	3,302	7,059	7,059
*Midland.....	".....	—	1,095	2,088	3,174	4,663	7,016
*Barrie.....	".....	3,398	4,854	5,550	5,949	6,420	6,936
*Smith Falls.....	".....	1,150	2,087	3,864	5,155	6,370	6,790
*Granby.....	Quebec.....	876	1,040	1,710	3,773	4,750	6,785
*Portage la Prairie.....	Manitoba.....	—	—	3,363	3,901	5,892	6,766
*Cap de la Madeline.....	Quebec.....	1,226	1,437	1,289	1,464	2,101	6,738
*North Sydney.....	Nova Scotia.....	—	1,520	2,513	4,646	5,418	6,585
*Prince Rupert.....	British Columbia.....	—	—	—	—	4,184	6,393
*Trenton.....	Ontario.....	1,796	3,042	4,363	4,217	3,988	5,902
*Waterloo.....	".....	1,594	2,066	2,941	3,537	4,359	5,883
*Collingwood.....	".....	2,829	4,445	4,939	5,755	7,090	5,882
*Ford City.....	".....	—	—	—	—	—	5,870
*Springhill.....	Nova Scotia.....	—	900	4,813	4,559	5,713	5,681
*New Waterford.....	Nova Scotia.....	—	—	—	—	—	5,615
*La Tuque.....	Quebec.....	—	—	—	—	2,934	5,603
*Campbellton.....	New Brunswick.....	—	—	—	2,652	3,817	5,570
*Hawkesbury.....	Ontario.....	1,671	1,920	2,042	4,150	4,400	5,544
*St. Jérôme.....	Quebec.....	1,159	2,032	2,868	3,619	3,473	5,491
*Preston.....	Ontario.....	1,408	1,419	1,843	2,308	3,883	5,423
*Kenora.....	".....	—	—	1,806	5,202	6,158	5,407
*Cobourg.....	".....	4,442	4,957	4,829	4,239	5,074	5,327
*Eastview.....	".....	—	—	—	776	3,169	5,324
*Stellarton.....	Nova Scotia.....	—	—	—	2,335	3,910	5,312
*Nelson.....	British Columbia.....	—	—	2,410	5,273 <sup>8</sup>	4,476	5,230
*Magog.....	Quebec.....	1,174	1,248	2,100	3,516	3,978	5,159
*Yorkton.....	Saskatchewan.....	—	—	—	700	2,309	5,151
*Ingersoll.....	Ontario.....	4,022	4,318	4,191	4,573	4,763	5,150

<sup>1</sup> Includes Maisonneuve, Cartierville, Bordeau and Sault-au-Recollet. <sup>2</sup> Includes North Toronto, less 67 in 1911 transferred to Township of York. <sup>3</sup> Includes town of Strathcona. <sup>4</sup> Includes town of Steelton. <sup>5</sup> Includes Parish of Lachine and Summerlea town. <sup>6</sup> Includes Notre Dame la Victorie. <sup>7</sup> Includes North Vancouver District. <sup>8</sup> Included suburbs in 1901.

**12.—Population of Towns and Villages having between 1,000 and 5,000 inhabitants in 1921, as compared with 1901 and 1911.**

Towns and Villages.	1901.	1911.	1921.	Towns and Villages.	1901.	1911.	1921.
<b>Prince Edward Island.</b>				<b>Quebec—continued.</b>			
Summerside.....	2,875	2,678	3,228	Point Claire St. Joachim.....	555	793	2,617
Souris.....	1,140	1,089	1,094	Bromptonville.....	—	1,239	2,603
<b>Nova Scotia.</b>				Lachute.....	1,022	2,407	2,592
Westville.....	3,471	4,417	4,550	Kenogami.....	—	—	2,557
Windsor.....	3,398	3,452	3,591	Iberville.....	512	1,905	2,454
Bridgewater.....	2,203	2,775	3,147	Richmond.....	2,057	2,175	2,450
Pictou.....	3,235	3,179	2,988	Nicolet.....	2,225	2,593	2,342
Inverness.....	306	2,719	2,963	Windsor.....	2,149	2,233	2,330
Trenton.....	1,274	1,749	2,844	Baie St. Paul.....	1,408	1,857	2,201
Lunenburg.....	2,916	2,681	2,792	Beauharnois.....	1,376	2,015	2,250
Parrsboro.....	3,391	2,856	2,748	St. Anne de Bellevue.....	1,443	1,416	2,212
Kentville.....	1,731	2,304	2,717	Mont-Laurier.....	—	752	2,211
Dominion.....	1,546	2,589	2,390	Berthier.....	507	1,011	2,204
Liverpool.....	1,937	2,109	2,294	Asbestos.....	1,564	1,335	2,193
Antigonish.....	1,838	1,787	1,746	Roberval.....	783	2,224	2,189
Wolfville.....	1,412	1,458	1,743	Laprairie.....	1,451	2,388	2,158
Joggins.....	1,088	1,648	1,732	Roberval.....	1,248	1,737	2,068
Canso.....	1,479	1,617	1,628	Loretteville.....	1,555	1,588	2,066
Wedgeport.....	1,026	1,392	1,424	Waterloo.....	1,791	1,886	2,063
Oxford.....	1,285	1,392	1,402	Terrebonne.....	1,822	1,990	2,056
Shelburne.....	1,445	1,435	1,360	Plessisville.....	1,586	1,550	2,032
Digby.....	1,150	1,247	1,230	Laval des Rapides.....	—	—	1,989
Mahone Bay.....	866	951	1,177	Pointe Gatineau.....	1,586	1,751	1,919
Louisburg.....	1,046	1,006	1,152	Montmorency.....	—	1,717	1,904
Bridgetown.....	858	996	1,086	Malbaie.....	826	1,449	1,883
<b>New Brunswick.</b>				Montreal West.....	352	703	1,882
Chatham.....	4,868	4,666	4,506	Ste. Rose.....	1,154	1,480	1,811
Edmundston.....	—	1,821	4,035	Saindon.....	—	—	1,793
Newcastle.....	2,507	2,945	3,507	St. Tite.....	991	1,438	1,783
St. Stephen.....	2,840	2,836	3,452	Montreal East.....	—	—	1,776
Woodstock.....	3,644	3,856	3,380	Louiseville.....	1,565	1,675	1,772
Bathurst.....	1,044	960	3,327	Point-aux-Trembles.....	—	1,167	1,764
Sussex.....	1,398	1,906	2,198	Chandler.....	—	—	1,756
Sackville.....	1,444	2,639	2,173	Marieville.....	1,306	1,587	1,748
Milltown.....	2,044	1,804	1,976	Grande Baie.....	—	1,355	1,735
Shediac.....	1,075	1,442	1,973	Sacré Cœur de Jésus.....	206	996	1,709
Dalhousie.....	862	1,650	1,958	St. Raymond.....	1,272	1,653	1,693
Devon.....	—	—	1,924	Bedford.....	1,364	1,432	1,669
Marysville.....	1,892	1,837	1,614	St. Gabriel de Brandon.....	1,199	1,602	1,667
Grand Falls.....	644	1,280	1,327	St. Joseph (Richelieu).....	647	1,416	1,658
Sunny Brae.....	—	—	1,171	St. Anne de Beaupré.....	847	2,066	1,648
Richibucto.....	100	871	1,158	Disraeli.....	1,018	1,606	1,646
St. George.....	733	988	1,110	Lennoxville.....	1,120	1,211	1,554
St. Andrews.....	1,064	987	1,065	Acton Vale.....	1,175	1,402	1,549
<b>Quebec.</b>				St. Marc-des-Carrières.....	296	1,224	1,492
Lauzon.....	3,416	3,978	4,966	Amos.....	—	—	1,488
Jonquière.....	—	2,354	4,851	Dorval.....	481	1,005	1,466
Longueuil(city).....	2,835	3,972	4,682	Bienville.....	851	1,004	1,462
Montmagny.....	1,919	2,617	4,145	St. Casimir.....	—	—	1,457
St. Lambert.....	1,362	3,344	3,890	Trois-Pistoles.....	—	—	1,454
Buckingham.....	2,936	3,854	3,835	Beauceville.....	—	1,677	1,448
East Angus.....	—	—	3,802	St. Joseph (Beauce).....	1,117	1,440	1,445
Victoriaville.....	1,693	3,028	3,759	Rock Island.....	615	861	1,442
Rimouski.....	1,804	3,097	3,612	Pont Rouge.....	—	—	1,419
Coaticook.....	2,880	3,165	3,554	Belœil.....	702	1,501	1,418
St. Pierre.....	505	2,201	3,535	St. Benoit Joseph Labre.....	—	1,070	1,416
Farnham.....	3,114	3,560	3,343	Huntingdon.....	1,122	1,265	1,401
Beaufort.....	—	—	3,240	Pierreville.....	1,108	1,363	1,394
St. Laurent.....	1,390	1,860	3,232	Montreal North.....	—	—	1,360
Mégantic.....	2,171	2,816	3,140	Lac-au-Saumon.....	—	1,171	1,354
St. Jérôme de Matane.....	1,176	2,056	3,050	St. Jacques.....	—	—	1,332
Ste. Thérèse.....	1,541	2,120	3,043	L'Assomption.....	1,605	1,747	1,320
Aylmer.....	2,291	3,109	2,970	Ste. Marie.....	—	—	1,311
Drummondville.....	1,450	1,725	2,852	St. Félicien.....	—	581	1,306
Ste. Agathe des Monts.....	1,073	2,020	2,812	Courville.....	—	—	1,293
Mont Joli.....	822	2,141	2,799	Danville.....	1,017	1,331	1,290
Black Lake.....	—	2,645	2,656	Charlesbourg.....	—	—	1,267
				Giffard.....	—	—	1,254
				Arthabaska.....	995	1,453	1,234
				Donnacona.....	—	—	1,225
				Baie Shawinigan.....	—	1,024	1,213
				Port d'Alfred.....	—	—	1,213
				Almaville.....	—	—	1,174



12.—Population of Towns and Villages having between 1,000 and 5,000 inhabitants in 1921, as compared with 1901 and 1911.—continued.

Towns and Villages.	1901.	1911.	1921.	Towns and Villages.	1901.	1911.	1921.
<b>Quebec—concluded.</b>				<b>Ontario—continued.</b>			
Laurentides.....	934	1,128	1,150	Huntsville.....	2,152	2,358	2,246
Como.....	628	898	1,146	Alexandria.....	1,911	2,323	2,195
Deschailhons.....	1,213	1,161	1,142	Aylmer.....	2,204	2,102	2,194
St. Remé.....	1,080	1,021	1,135	Orangeville.....	2,511	2,340	2,187
Greenfield Park.....	—	—	1,112	Wingham.....	2,392	2,238	2,092
Macamic.....	—	—	1,104	Kincardine.....	2,077	1,956	2,077
St. Eustache.....	1,079	996	1,098	Georgetown.....	1,313	1,583	2,061
Cowansville.....	699	881	1,094	Clinton.....	2,547	2,254	2,018
La Providence.....	819	894	1,078	Elmira.....	1,060	1,782	2,016
Chambly Basin.....	849	900	1,068	Grimsby.....	1,001	1,669	2,004
St. George East.....	544	1,410	1,058	Milton.....	1,372	1,654	1,873
Rawdon.....	—	—	1,042	Ridgetown.....	2,405	1,954	1,855
Montreal South.....	—	790	1,030	Deseronto.....	3,527	2,013	1,847
Abord-à-Plouffe.....	—	—	1,011	Blind River.....	2,656	2,558	1,843
<b>Ontario.</b>				Seaforth.....	2,245	1,983	1,829
Dundas.....	3,173	4,299	4,978	Mitchell.....	1,945	1,766	1,800
Renfrew.....	3,153	3,846	4,906	Fergus.....	1,396	1,534	1,796
Thorold.....	1,979	2,273	4,825	Kingsville.....	1,537	1,427	1,783
Brampton.....	2,748	3,412	4,527	Warton.....	2,443	2,266	1,726
Port Hope.....	4,188	5,092	4,456	Acton.....	2,484	1,720	1,722
Cobalt.....	—	5,638	4,449	Mount Forest.....	1,019	1,839	1,718
Sandwich.....	1,450	2,302	4,415	Chesley.....	1,734	1,734	1,708
Paris.....	3,229	4,038	4,368	Tilbury.....	1,012	1,368	1,673
Sturgeon Falls.....	1,418	2,199	4,125	Thessalon.....	1,205	1,945	1,651
Goderich.....	4,158	4,522	4,107	Essex.....	1,391	1,353	1,588
Arnprior.....	4,152	4,405	4,077	Blenheim.....	1,653	1,387	1,565
Penetanguishene.....	2,422	3,568	4,037	Fort Erie.....	890	1,146	1,546
Wallaceburg.....	2,763	3,438	4,006	Southampton.....	1,636	1,685	1,537
Simcoe.....	2,627	3,227	3,953	Humberstone.....	—	—	1,524
St. Marys.....	3,354	3,388	3,847	Palmerston.....	1,850	1,665	1,523
Timmins.....	—	—	3,843	Vankleek Hill.....	1,674	1,577	1,499
Carleton Place.....	4,059	3,621	3,841	Durham.....	1,422	1,581	1,494
Perth.....	3,588	3,588	3,790	Port Dalhousie.....	1,125	1,152	1,492
Mimico.....	437	1,373	3,751	Gravenhurst.....	2,146	1,624	1,478
Haileybury.....	—	3,874	3,743	Victoria Harbour.....	989	1,616	1,463
Leamington.....	2,451	2,652	3,675	Port Dover.....	1,177	1,138	1,462
Newmarket.....	2,125	2,996	3,626	Mattawa.....	1,400	1,524	1,462
Gananoque.....	3,526	3,804	3,604	Morrisburg.....	1,693	1,696	1,444
Perry Sound.....	2,884	3,429	3,546	Rainy River.....	—	—	1,578
Rockland.....	1,998	3,397	3,496	Exeter.....	1,792	1,555	1,442
Port Colborne.....	1,253	1,624	3,415	Forest.....	1,553	1,445	1,422
Pictou.....	3,698	3,564	3,356	Brighton.....	1,378	1,320	1,411
Cochrane.....	—	1,715	3,306	Alliston.....	1,256	1,279	1,376
Oakville.....	1,643	2,372	3,298	Niagara.....	1,258	1,318	1,357
Bowmanville.....	2,721	2,814	3,233	New Hamburg.....	1,208	1,484	1,351
Dunnville.....	2,105	2,861	3,224	Dresden.....	1,613	1,551	1,339
Weston.....	1,083	1,875	3,166	Keewatin.....	1,168	1,368	1,339
Petrolia.....	4,135	3,518	3,148	L'Orignal.....	1,156	1,242	1,327
Fort Francis.....	697	1,611	3,109	Port Elgin.....	1,026	1,347	1,298
Napanee.....	3,143	2,807	3,038	Capreol.....	1,313	1,235	1,291
Tilsonburg.....	2,241	2,753	2,974	Havelock.....	984	1,436	1,268
Campbellford.....	2,485	3,051	2,890	Harriston.....	1,637	1,491	1,263
Whitby.....	2,110	2,248	2,800	Point Edward.....	780	874	1,258
Hanover.....	1,392	2,342	2,781	Beamsville.....	832	1,096	1,256
Hespeler.....	2,457	2,368	2,777	Cardinal.....	1,378	1,111	1,241
Amherstburg.....	2,222	2,560	2,769	Caledonia.....	801	952	1,223
Burlington.....	1,119	1,831	2,709	Kemptville.....	1,523	1,192	1,204
Strathroy.....	2,933	2,823	2,691	Lakefield.....	1,244	1,397	1,180
New Toronto.....	209	686	2,669	Iroquois Falls.....	—	—	1,178
Meaford.....	1,916	2,811	2,650	Norwich.....	1,269	1,112	1,176
Prescott.....	3,019	2,801	2,636	Hagersville.....	1,020	1,106	1,169
Copper Cliff.....	2,500	3,082	2,597	Riverside.....	—	—	1,155
Merriton.....	1,710	1,670	2,544	Parkhill.....	1,430	1,289	1,152
Listowel.....	2,693	2,289	2,477	Port Perry.....	1,465	1,148	1,143
Bracebridge.....	2,479	2,776	2,451	Chippawa.....	460	707	1,137
Almonte.....	3,023	2,452	2,426	Elora.....	1,187	1,197	1,136
Bridgeburg.....	1,356	1,770	2,401	Sioux Lookout.....	—	550	1,127
Fortsmouth.....	1,827	1,786	2,351	Winchester.....	1,101	1,143	1,126
Walkerton.....	2,971	2,601	2,344	Port Credit.....	—	—	1,123
Aurora.....	1,590	1,901	2,307	Waterford.....	1,122	1,083	1,123
New Liskeard.....	—	2,108	2,268	Arthur.....	1,285	1,102	1,104
				Bobcaygeon.....	914	1,000	1,095



**12.—Population of Towns and Villages having between 1,000 and 5,000 inhabitants in 1921, as compared with 1901 and 1911.—concluded.**

Towns and Villages.	1901.	1911.	1921.	Towns and Villages.	1901.	1911.	1921.
<b>Ontario—concluded.</b>				<b>Alberta.</b>			
Port McNicoll.....	—	—	1,074	Drumheller.....	—	—	2,499
Shelburne.....	1,188	1,113	1,072	Red Deer (city).....	323	2,118	2,328
Watford.....	1,279	1,092	1,059	Wetaskiwin (city).....	550	2,411	2,061
Madoc.....	1,157	1,058	1,058	Camrose.....	—	1,586	1,892
Richmond Hill.....	629	652	1,055	Macleod.....	796	1,844	1,723
Stouffville.....	1,223	1,034	1,053	Taber.....	—	1,400	1,705
Chelmsford.....	493	550	1,045	Cardston.....	439	1,207	1,612
Fenelon Falls.....	1,132	1,053	1,031	Ponoka.....	751	642	1,594
Egryn.....	140	715	1,019	Coleman.....	—	1,557	1,590
Dryden.....	1,107	1,189	1,015	Blairmore.....	231	1,137	1,552
Markham.....	967	909	1,012	Vegreville.....	—	1,029	1,479
Tavistock.....	403	981	1,011	Stettler.....	—	1,444	1,416
<b>Manitoba.</b>				Raymond.....	—	1,465	1,394
Transcona.....	—	—	4,185	Hanna.....	—	—	1,364
Dauphin.....	1,135	2,815	3,885	Vermilion.....	—	625	1,272
Selkirk.....	2,188	2,977	3,726	High River.....	1,183	1,182	1,198
Neepawa.....	1,418	1,864	1,837	Edson.....	—	497	1,138
The Pas.....	—	—	1,858	Redcliff.....	—	220	1,137
Souris.....	839	1,854	1,710	Lacombe.....	499	1,029	1,133
Carman.....	1,439	1,271	1,591	Magrath.....	424	995	1,069
Minnedosa.....	1,052	1,483	1,505	Grande Prairie.....	—	—	1,061
Virden.....	901	1,550	1,361	Big Valley.....	—	—	1,057
Morden.....	1,522	1,130	1,268	Beverly.....	—	—	1,039
Stonewall.....	589	1,005	1,112	<b>British Columbia.</b>			
Tuxedo.....	—	—	1,062	<b>(Cities).</b>			
<b>Saskatchewan.</b>				Kamloops.....	—	3,772	4,501
North Battleford (city).....	—	2,105	4,108	Fernie.....	—	3,146	4,343
Swift Current (city).....	121	1,852	3,518	Vernon.....	802	2,671	3,685
Weyburn (city).....	113	2,210	3,193	Cumberland.....	732	1,237	3,176
Melville.....	—	1,816	2,808	Trail.....	1,360	1,460	3,020
Estevan.....	141	1,981	2,290	Revelstoke.....	1,600	3,017	2,782
Kamsack.....	—	473	2,002	Cranbrook.....	1,196	3,090	2,725
Humboldt.....	—	859	1,822	Kelowna.....	261	1,663	2,520
Melfort.....	—	599	1,746	Port Coquitlam.....	—	—	2,148
Birgar.....	—	315	1,535	Roseland.....	6,156	2,826	2,097
Indian Head.....	768	1,285	1,429	Prince George.....	—	—	2,053
Canora.....	—	435	1,230	Ladysmith.....	746	3,295	1,967
Battleford.....	609	1,335	1,229	Chilliwack.....	277	1,657	1,767
Shamavon.....	—	—	1,146	Meritt.....	—	703	1,721
Gravelbourg.....	—	—	1,106	Grand Forks.....	1,012	1,577	1,469
Watrous.....	—	781	1,101	Duncan.....	—	—	1,178
Moosomin.....	868	1,143	1,099	Port Alberni.....	—	—	1,056
Rosthern.....	413	1,172	1,074	Port Moody.....	—	—	1,030
Assiniboia.....	—	—	1,006				
Kindersley.....	—	456	1,003				
Maple Creek.....	382	936	1,002				

**POPULATION OF THE PRAIRIE PROVINCES.**

The Census and Statistics Act, 1905, provided for the taking of a census of population and agriculture in Manitoba, Saskatchewan and Alberta in 1906 and in every tenth year thereafter, thus instituting, in addition to the general decennial census for all Canada, a quinquennial census of population and agriculture for the three Prairie Provinces. The quinquennial census of Manitoba, Saskatchewan and Alberta was therefore taken as for June 1, 1916, and the complete results were published in a Report dated January 12, 1918. A summary of the principal data was published in the Year Book for 1918, pages 105-112.

**Total Population of Prairie Provinces.**—The male and female population of Manitoba, Saskatchewan and Alberta (a) by provinces, (b) by the electoral districts constituted by the Representation Act, 1914 (4-5 Geo. V, c. 51), and (c) by cities, towns and villages, as compared with the population by sex for 1911 and by totals for 1901 and 1906, was published in the Year Book of 1916-17 (pp. 95-105). The total population of the three prairie provinces in 1916 was returned as 1,698,220, compared with 1,328,725 in 1911, 808,863 in 1906 and 419,512 in 1901. As the population of the prairie provinces in 1921 was 1,956,082 the increase during the five year period since 1916 was 257,862 or 15·18 per cent. This comparatively low rate of increase as compared with the increase of 28 per cent during the five years ended 1916 was undoubtedly due to the effect of the war in restricting immigration. Table 13 shows the population of the prairie provinces for 1901, 1906, 1911, 1916 and 1921, the population being distinguished by sex for 1911 and 1916.

**13.—Population of the Prairie Provinces, 1901, 1906, 1911, 1916 and 1921.**

Provinces.	1901.	1906.	1911.			1916.			1921.
	Total.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Total.
Manitoba.....	255,211	365,688	253,056	208,574	461,630	294,609	259,251	553,860	610,118
Saskatchewan.....	91,279	257,763	291,730	200,702	492,432	363,787	284,048	647,835	757,510
Alberta.....	73,022	185,412	223,989	150,674	374,663	277,256	219,269	496,525	588,454
<b>Total.....</b>	<b>419,512</b>	<b>808,863</b>	<b>768,775</b>	<b>559,950</b>	<b>1,328,725</b>	<b>935,652</b>	<b>762,568</b>	<b>1,698,220</b>	<b>1,956,082</b>

**14.—Population of Prairie Provinces by Sex at each Census Period from 1870 for Manitoba and from 1901 for Saskatchewan and Alberta.**

Provinces and Years.	Population.			Increase over Preceding Census.					
	Males.	Fe- males.	Total.	Males.		Females.		Total.	
	No.	No.	No.	No.	p.c.	No.	p.c.	No.	p.c.
<b>Manitoba—</b>									
1870.....	6,317	5,911	12,228	—	—	—	—	—	—
1881.....	35,123	27,137	62,260	28,806	456·01	21,226	359·10	50,032	409·16
1886.....	59,594	49,046	108,640	24,471	69·67	21,909	80·73	46,380	74·49
1891.....	84,342	68,164	152,506	24,748	41·53	19,118	38·98	43,866	40·37
1896.....	1	1	193,425	—	—	—	—	40,919	26·83
1901 <sup>2</sup> .....	138,504	116,767	255,211	54,162	64·22	48,543	71·22	102,705	67·34
1906.....	205,183	160,505	365,688	66,679	48·14	43,798	37·53	110,477	43·29
1911.....	253,056	208,574	461,394	47,873	23·33	48,069	29·95	95,942	26·23
1916.....	294,609	259,251	553,860	41,553	16·42	50,677	24·30	92,230	19·98
1921.....	—	—	610,118	—	—	—	—	56,258	10·16
<b>Saskatchewan—</b>									
1901.....	49,431	41,848	91,279	—	—	—	—	—	—
1906.....	152,791	104,972	257,763	103,360	209·10	63,124	150·84	166,484	182·39
1911.....	291,730	200,702	492,432	138,939	90·93	95,730	91·20	234,669	91·05
1916.....	363,787	284,048	647,835	72,057	24·70	83,346	41·52	155,403	31·50
1921.....	—	—	757,510	—	—	—	—	109,675	16·93
<b>Alberta—</b>									
1901.....	41,019	32,003	73,022	—	—	—	—	—	—
1906.....	108,283	77,129	185,412	67,264	163·98	45,126	141·00	112,390	153·91
1911.....	223,989	150,674	374,295	115,706	106·86	73,545	95·35	189,251	102·07
1916.....	277,256	219,269	496,525	53,267	23·78	68,595	45·53	121,862	32·53
1921.....	—	—	588,454	—	—	—	—	91,929	18·51

<sup>1</sup> In 1896 the Census consisted of a count of population only.

<sup>2</sup> Ten-year increase shown.

**14.—Population of Prairie Provinces by Sex at each Census Period from 1870 for Manitoba and from 1901 for Saskatchewan and Alberta.—concluded.**

Provinces and Years.	Population.			Increase over Preceding Census.					
	Males.	Fe- males.	Total.	Males.		Females.		Total.	
	No.	No.	No.	No.	p.c.	No.	p.c.	No.	p.c.
Prairie Provinces—									
1901.....	228,954	190,558	419,512	—	—	—	—	—	—
1906.....	466,257	342,606	808,863	237,303	103.64	152,048	79.79	389,351	92.81
1911.....	768,775	559,950	1,328,121	302,518	64.88	217,344	63.44	519,862	64.27
1916.....	935,652	762,568	1,698,220	166,877	21.71	202,618	36.19	369,495	27.81
1921.....	—	—	1,956,020	—	—	—	—	257,862	15.18

**15.—City Population of the Prairie Provinces, 1901, 1906, 1911, 1916 and 1921.**

Provinces.	1901.	1906.	1911.			1916.			1921.
	Total.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Total.
Manitoba—									
Brandon.....	5,620	10,408	7,362	6,477	13,839	7,697	7,518	15,215	15,397
Portage la Prairie.....	3,901	5,106	3,118	2,774	5,892	2,978	2,901	5,879	6,766
St. Boniface.....	2,019	5,119	4,029	3,454	7,483	5,488	5,533	11,021	12,821
Winnipeg.....	42,340	90,153	74,406	61,629	136,035	82,227	80,773	163,000	179,087
Saskatchewan—									
Moosejaw.....	1,558	6,249	8,964	4,859	13,823	9,007	7,927	16,934	19,285
North Battleford.....	—	824	1,258	847	2,105	1,679	1,466	3,145	4,108
Prince Albert.....	1,785	3,005	3,727	2,527	6,254	3,397	3,039	6,436	7,558
Regina.....	2,249	6,169	19,767	10,446	30,213	13,655	12,472	26,127	34,432
Saskatoon.....	113	3,011	7,217	4,787	12,004	10,719	10,329	21,048	25,739
Swift Current.....	121	554	1,096	756	1,852	1,681	1,500	3,181	3,518
Weyburn.....	113	966	1,302	908	2,210	1,574	1,476	3,050	3,193
Yorkton.....	700	1,363	1,303	1,006	2,309	1,596	1,548	3,144	5,151
Alberta—									
Calgary.....	4,392	13,573	26,565	17,139	43,704	29,278	27,236	56,514	63,305
Edmonton <sup>1</sup> .....	4,176	14,088	17,054	13,425	31,064	27,462	26,384	53,846	58,821
Lethbridge.....	2,072	2,313	4,462	3,588	9,035	4,896	4,540	9,436	11,097
Medicine Hat.....	1,570	3,020	3,207	2,401	5,608	4,781	4,491	9,272	9,634
Red Deer.....	323	1,418	1,213	905	2,118	1,127	1,076	2,203	2,328
Wetaskiwin.....	550	1,652	1,264	1,147	2,411	1,047	1,001	2,048	2,061

<sup>1</sup> Includes Strathcona.

**POPULATION OF THE BRITISH EMPIRE.**

During the decade 1911-1921 the boundaries of the British Empire were contracted by the voluntary giving up of Egypt and expanded by the addition of various territories as a result of the war. The increases of territory were mainly in Africa, where the Tanganyika Territory, Southwest Africa, and portions of the Cameroons and Togoland were added to the Empire, with an aggregate area of 731,000 square miles and an estimated population of slightly over 5,000,000. In Asia the territories acquired by mandate from the League of Nations include Palestine and Mesopotamia, with 3,619,282 inhabitants on an area of 152,250 square miles. In the Pacific the territories added to the Empire include Western Samoa, the Territory of New Guinea, the Bismarek Archipelago and part of the Solomon Islands, all of which were formerly German possessions. According to the most reliable estimates the total area of these regions is 90,802 square miles with a population of 637,051.

Statistics of the area and population of the territories included in the British Empire in 1921 are given in Table 16, together with comparative figures of population for 1901 and 1911.

**16.—Area and Population of the British Empire, by Countries, 1901, 1911 and 1921.**

(From the British Statistical Abstract, Statesman's Year Book, and other sources.)

Countries.	Area in square miles, 1921.	Population.		
		Census of 1901, Total.	Census of 1911, Total.	Census of 1921, Total.
<b>Europe.</b>				
England and Wales.....	58,360	32,527,843	36,070,492	37,885,242
Scotland.....	30,405	4,472,103	4,760,904	4,882,288
Ireland.....	32,586	4,458,775	4,390,219	4,496,000 <sup>1</sup>
Islands.....	302	150,370	148,915	149,852
<b>Total, United Kingdom.....</b>	<b>121,653</b>	<b>41,609,091</b>	<b>45,370,530</b>	<b>47,413,382</b>
Gibraltar <sup>4</sup> .....	1½	20,355	19,120	17,690
Malta <sup>4</sup> .....	117	184,742	211,564	224,859
<b>Total, Europe.....</b>	<b>121,771½</b>	<b>41,814,188</b>	<b>45,501,214</b>	<b>47,655,931</b>
<b>Asia.</b>				
Aden, including Perim.....	80	43,974	46,165	54,923
Socotra.....	1,382	12,000 <sup>2</sup>	12,000 <sup>2</sup>	12,000 <sup>2</sup>
Borneo—				
British North Borneo.....	31,106	104,527	208,183	208,183
Brunei.....	4,000	10,000 <sup>2</sup>	21,718 <sup>2</sup>	25,454 <sup>3</sup>
Sarawak.....	42,000	500,000	500,000	500,000
<b>Total, Borneo.....</b>	<b>77,106</b>	<b>614,527</b>	<b>729,901</b>	<b>733,637</b>
Bahrein Is. Prot.....	275	—	—	110,000 <sup>2</sup>
Ceylon <sup>4</sup> .....	25,481	3,565,954	4,106,350	4,504,283
Maldivé Is.....				70,000 <sup>2</sup>
Cyprus <sup>5 6</sup> .....	3,584	237,022	273,964	310,808 <sup>2 9</sup>
Hong Kong <sup>6</sup> .....	391	283,905	366,145	625,166
New Territories.....		102,254	90,594	
India, British.....	1,092,994	231,855,533	244,221,377	247,138,000
Native States.....	709,583	62,461,549	70,888,854	71,937,000
<b>Total, India.....</b>	<b>1,802,577</b>	<b>294,317,082</b>	<b>315,110,231</b>	<b>319,075,000</b>
Straits Settlements.....	1,572	573,598	715,529	881,939 <sup>7</sup>
Labuan.....	28	8,411	6,546	
Christmas Is.....	81	704	1,463 <sup>2</sup>	
Cocos or Keeling Is.....	—	645	749	
<b>Total, Straits Settlements.....</b>	<b>1,681</b>	<b>583,358</b>	<b>724,287</b>	<b>884,951</b>
Asiatic Mandates—				
Palestine.....	9,000	—	—	770,000
Mesopotamia (Iraq.).....	143,250	—	—	2,849,282 <sup>2 8</sup>
<b>Total, Asiatic Mandates.....</b>	<b>152,250</b>	<b>—</b>	<b>—</b>	<b>3,619,282</b>
Federated Malay States—				
Perak.....	7,875	329,665	494,057	Population by states not yet available.
Selangor.....	3,138	168,789	294,035	
Negri Sembilan.....	2,573	96,028	130,199	
Pahang.....	14,037	84,113	118,708	
<b>Total, Federated Malay States..</b>	<b>27,623</b>	<b>678,595</b>	<b>1,036,999</b>	<b>1,316,000<sup>2</sup></b>
Unfederated Malay States—				
Johore.....	8,000	200,000 <sup>2</sup>	180,412	282,244
Kedah.....	3,800	Not available.	245,986	338,544
Perlis.....	305		32,746	40,091
Kelantan.....	5,500		286,751	309,293
Trengganu.....	6,000		154,073	153,092
<b>Total, Unfederated Malay States</b>	<b>23,505</b>	<b>—</b>	<b>899,968</b>	<b>1,123,264</b>



**16.—Area and Population of the British Empire, by Countries,  
1901, 1911 and 1921.—continued.**

Countries.	Area in square miles, 1921.	Population.		
		Census of 1901, Total.	Census of 1911, Total.	Census of 1921, Total.
Wei-Hai-Wei.....	285	130,792	147,133	—
<b>Africa.</b>				
Ascension.....	34	410	400	250
British East Africa—				
Kenya Colony and Prot.....	245,060	4,000,000 <sup>10</sup>	2,402,863 <sup>11</sup>	2,630,000 <sup>2</sup>
Tanganyika Terr. (late German East Africa).....	365,000	—	—	4,106,700 <sup>12</sup>
Uganda Prot.....	111,828 <sup>13</sup>	3,500,000 <sup>10</sup>	2,843,325	3,071,608 <sup>14</sup>
Zanzibar Prot.....	640	—	—	197,000 <sup>2</sup>
Pemba.....	380	—	—	—
Mauritius.....	720	371,023 <sup>5</sup>	368,791	376,108
Dependencies of.....	89	4,859	6,690	—
Nyasaland Prot.....	39,956	706,000	970,430	1,201,519
St. Helena.....	47	3,342	3,477	4,000
Tristan da Cunha.....	—	—	105 <sup>15</sup>	—
Seychelles.....	156	19,237	22,691	24,811
Somaliland Prot.....	68,000	153,000	344,323	300,000 <sup>2</sup>
South Africa—				
Basutoland.....	11,716	348,848 <sup>16</sup>	404,507	500,504 <sup>2</sup>
Bechuanaland Prot.....	275,000	120,776 <sup>16</sup>	125,350	152,983
Rhodesia, Southern.....	148,575	503,065	771,077	1,736,000
Rhodesia, Northern.....	291,000	746,000 <sup>17</sup>	822,482	—
Swaziland.....	6,678	85,491 <sup>16</sup>	99,959	133,563
Union of South Africa—				
Cape of Good Hope.....	276,966	2,409,804 <sup>16</sup>	2,564,965	2,782,712 <sup>18</sup>
Natal.....	35,291	1,108,754 <sup>16</sup>	1,194,043	1,427,706 <sup>18</sup>
Orange Free State.....	50,389	387,315 <sup>16</sup>	528,174	618,802 <sup>18</sup>
Transvaal.....	110,450	1,269,951 <sup>16</sup>	1,686,212	2,087,772 <sup>18</sup>
South West Africa.....	322,400	—	—	237,237
<b>Total, Union of South Africa.....</b>	<b>795,496</b>	<b>5,175,824<sup>16</sup></b>	<b>5,973,394</b>	<b>7,154,229</b>
West Africa—				
Nigeria, Northern Protectorate of.....	257,355	9,161,700 <sup>19</sup>	9,269,000	8,500,000
Nigeria, Southern, and Colony of <sup>20</sup> .....	79,880	{ 3,055,546 1,388,847 }	7,857,983	7,750,000
British Cameroon.....	31,000	—	—	400,000 <sup>2</sup>
Gambia <sup>20</sup> .....	4,132	90,354	146,101	248,000 <sup>2</sup>
Gold Coast, Ashanti and Prot.....	79,506	1,486,433	1,503,386	2,029,750
Northern Terr. Prot.....	31,100	Not available.	360,000 <sup>2</sup>	—
Togoland.....	12,600	—	—	300,000 <sup>2</sup>
Sierra Leone <sup>20</sup> .....	30,000	1,024,178	1,403,132 <sup>21</sup>	1,400,000 <sup>2</sup>
<b>Total, West Africa.....</b>	<b>525,573</b>	<b>16,207,058</b>	<b>20,539,602</b>	<b>20,627,750</b>
Anglo-Egyptian Sudan.....	1,014,000	—	—	3,400,000 <sup>22</sup>
<b>America.</b>				
Bermuda <sup>3</sup> .....	19	17,535	18,994	21,987
Dominion of Canada.....	3,729,665	5,371,315	7,206,643	8,788,483
Falkland Is.....	7,500	2,043	3,275	3,255
British Guiana <sup>23</sup> .....	90,500	293,958	296,041	297,691
British Honduras.....	8,598	37,479	40,458	45,317
Newfoundland.....	42,734	217,037	238,670	259,317
Labrador.....	120,000	3,947	3,949	3,621
West India Islands—				
Bahamas.....	4,404	53,735	55,944	53,031
Barbados.....	166	195,588	171,983	198,000 <sup>2</sup>
Jamaica.....	4,207	755,730	831,383	857,921
Cayman Is.....	89	5,000	5,486	3,945
Turk's and Caicos Is.....	166	5,287	5,615	5,612
Leeward Is.—				
Virgin Is.....	56	4,908	5,557	5,082
St. Christopher.....	68	29,782	26,283	—
Nevis.....	50	12,774	12,945	38,214
Anguilla.....	34	3,890	4,075	—
Antigua, including Barbuda.....	169	34,953	32,265	—
Montserrat, including Redonda.....	33	12,335	12,200	12,120
Dominica.....	305	28,894	33,863	37,059

**16.—Area and Population of the British Empire, by Countries,  
1901, 1911 and 1921—concluded.**

Countries.	Area in square miles, 1921.	Population.		
		Census of 1901, Total.	Census of 1911, Total.	Census of 1921, Total.
Trinidad.....	1,862	255,148	312,803	391,279 <sup>14</sup>
Tobago.....	114	18,751	20,749	
Windward Is.—				
St. Lucia.....	233	49,883	48,637	51,505
St. Vincent.....	150	47,548	41,877	44,447
Grenada and the Grenadines.....	133	63,438	73,636	75,663 <sup>14</sup>
<b>Total, West Indies.....</b>	<b>12,239</b>	<b>1,577,644</b>	<b>1,595,321</b>	<b>1,773,878</b>
<b>Australasia.</b>				
Australia, Commonwealth of—				
New South Wales.....	309,432	1,354,846	1,646,734	2,099,763
Federal Capital Terr.....	940	—	1,714	2,572
Victoria.....	87,884	1,201,070	1,315,551	1,531,529
South Australia.....	380,070	363,157	408,553	495,336
Northern Terr.....	523,620	—	3,310	3,870
Western Australia.....	975,920	184,124	282,114	332,213
Tasmania.....	26,215	172,475	191,211	213,877
Queensland.....	670,500	498,129	605,813	757,634
<b>Total, Commonwealth <sup>24</sup>.....</b>	<b>2,974,581</b>	<b>3,773,801</b>	<b>4,455,005</b>	<b>5,436,794</b>
Territory of Papua.....	90,540	350,000 <sup>25</sup>	380,000 <sup>25</sup>	251,392 <sup>25</sup>
Dom. of New Zealand <sup>27</sup> .....	104,751	772,719	1,008,468	1,218,913
Terr. of Western Samoa.....	1,250	—	—	37,051
Nauru.....	10	—	—	1,985 <sup>26</sup>
Fiji.....	7,435	120,124	139,541	162,604 <sup>14</sup>
Pacific Islands—				
Tongan Is. Prot. (Friendly Is.).....	390	22,011	23,737	23,562 <sup>3</sup>
Terr. of New Guinea (late German New Guinea)—				
New Guinea (Kaiser Wilhelm's Land).....	70,000	—	—	395,000 <sup>2</sup>
Bismarck Archipelago.....	15,752	—	—	188,000 <sup>2</sup>
Solomon Is. Prot.....	3,800	—	—	17,000 <sup>3</sup>
Brit. Solomon Islands Prot.....	11,000	—	150,000	150,750 <sup>3</sup>
Gilbert and Ellice Is. Colony.....	187	37,600	31,121	33,000 <sup>2</sup>
Phoenix Group.....	16	59	59	59
Pitcairn.....	2	126	140 <sup>28</sup>	—
Starbuck Is.....	1	uninhabited.	—	—
Jarvis Is.....	1 <sup>3</sup>	30	30	30
Malden.....	35	168	168	168
<b>Total, Pacific Islands.....</b>	<b>101,184<sup>3</sup></b>	<b>59,994</b>	<b>205,255</b>	<b>807,569</b>
<b>Grand Total.....</b>	<b>13,419,046<sup>3</sup></b>	<b>377,126,180</b>	<b>420,535,912</b>	<b>444,822,232</b>

<sup>1</sup> Estimated population in the middle of 1921. No census in 1921. <sup>2</sup> Estimated population. <sup>3</sup> Estimated population, 1919. <sup>4</sup> Excluding the military and persons on ships in harbours. <sup>5</sup> Excluding the military and persons on ships in harbours. <sup>6</sup> Cyprus, which had been administered by England under a convention, dated 4th June, 1878, was annexed on the 5th November, 1914. <sup>7</sup> Inclusive of Labuan. <sup>8</sup> Estimated population, 1918. <sup>9</sup> By the Shantung settlement at Washington, January, 1922, Wei-Hai-Wei is to be restored to China. <sup>10</sup> Estimated population, 1903. <sup>11</sup> Administered provinces only. <sup>12</sup> From Colonial Office list, 1922. <sup>13</sup> Including 16,377 square miles of water within the territorial limits of the Uganda Protectorate. <sup>14</sup> Estimated population, Dec., 1920. <sup>15</sup> Population in 1916. <sup>16</sup> Population in 1904. <sup>17</sup> Partly estimated, a census of natives not being available. <sup>18</sup> Preliminary census figures as taken from the Monthly Bulletin of Union Statistics, May, 1922. <sup>19</sup> Population as stated in the Northern Nigeria report for 1904-5, and based on estimates made in 1904 by Residents in charge in the various Provinces of the Protectorate. <sup>20</sup> Including the Protectorate districts. <sup>21</sup> Including 567,561 children—sex not stated. <sup>22</sup> Estimated population, 1917. <sup>23</sup> Exclusive of certain Aborigines estimated to number 13,000 at the census of 1911. <sup>24</sup> The population stated for Australia is exclusive of full-blooded Aborigines, estimated at 100,000 in 1911. <sup>25</sup> Number of Papuans, estimated. <sup>26</sup> Population in 1920. <sup>27</sup> The area (280 square miles) and population (12,598 in 1911) of the Cook and other islands of the Pacific are excluded. The Maori population (43,143 in 1901 and 49,844 in 1911) is also excluded. <sup>28</sup> Population in 1914. <sup>29</sup> Preliminary return.

**VITAL STATISTICS.**

The collection of vital statistics commenced in Canada, as in England, with the registration of baptisms, marriages and burials by the ecclesiastical authorities. These registers, maintained by the priests from the first settlement of the country, have made it possible for the vital statistics of the French colony to be compiled from the year 1610.<sup>1</sup> In the beginning, only one copy of such records was made, but in 1678 the Sovereign Council of Quebec ordered that in future such records should be made in duplicate, and that one copy, duly authenticated, should be delivered to the civil authorities. This arrangement was continued after the cession of the country to England, and was extended to the newly-established Protestant churches by an Act of 1793, but the registration among these latter remained seriously defective, both in Lower Canada and in the newly-established province of Upper Canada.

In English-speaking Canada, vital statistics were from the commencement seriously defective, the pioneer settlers often going out into the wilds far from the authority of government and the ministrations of religion. While a law existed in Upper Canada requiring ministers of religion to deposit duplicates of their registers of baptisms, marriages and deaths with the clerks of the peace for transmission to the provincial secretary, this law remained practically a dead letter. Again, the efforts made to secure records of births and deaths at the censuses of 1851 and 1861 produced most unsatisfactory and even ridiculous results, as was pointed out by Dr. J. C. Taché, secretary of the board of registration and statistics, in a memorial published in the report of the Canadian Minister of Agriculture for the year 1865. Nevertheless, in spite of the inherent unsoundness of securing at a point of time in a decennial census a record of births and deaths occurring over a considerable period of time, this method was persisted in down to 1911, when the obviously untrustworthy character of the results obtained led to the discarding of the data obtained at the inquiry. In Montreal and Toronto, for example, the local records showed 11,038 and 5,593 deaths respectively in the calendar year 1910, while the census records showed only 7,359 and 3,148 deaths respectively in the year from June 1, 1910, to May 31, 1911. Similar discrepancies were shown for other areas, proving the census data to be very incomplete.

The Dominion Government instituted in the early 80's a plan for compiling the annual mortuary statistics of cities of 25,000 population and over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax and St. John. By 1891 the list had grown to 25, at a time when in most of the provinces the only birth and death statistics were those of the municipalities. Upon the organization of provincial bureaus of vital statistics, however, this work was abandoned, though a conference of Dominion

<sup>1</sup>For a summary of the vital statistics of the Roman Catholic population from 1610 to 1883, see the Statistical Year Book of Quebec, 1921, English or French edition, p. 51. For details by years of this movement of population, see Vol. V of the Census of 1871, pp. 160-265 and Vol. IV of the Census of 1881, pp. 134-145.



and provincial officials, held in 1893, passed a resolution calling upon the provincial and Dominion authorities to co-operate in the work of collecting, compiling and publishing the vital statistics of the Dominion. This resolution had, however, no immediate practical results in securing accurate or comparable vital statistics.

Each province (except New Brunswick, which had no vital statistics) enacted its own legislation on vital statistics and administered such legislation according to its own individual methods. While the vital statistics of Ontario were published in considerable detail annually since 1871, the arrangements for the collection of data were unsatisfactory. Only in 1906 was the publication of vital statistics begun in Prince Edward Island (no report for 1912 has ever been issued), and in Nova Scotia the publication of vital statistics dates only from 1909. Because of the *lacunæ*, and even more because of the incomparability of facts collected, of methods of collection and of standard of enforcement, Canadian vital statistics remained extremely unsatisfactory and impossible to be compiled on a national basis, as was pointed out by the 1912 commission on official statistics, which recommended that "for the Dominion, now engaged in building up its national unity, it is important that uniform data should render possible to statisticians the institution of true interprovincial and international comparisons. By effective co-operation of the provinces with the Dominion this object should be capable of attainment without sacrificing the liberty of each province to satisfy its own special statistical requirements." The scheme of co-operation, thus outlined, has now been brought into effect as a consequence of the establishment of the Dominion Bureau of Statistics, under the Statistics Act of 1918, which specifically provided that the Bureau should publish an annual report on vital statistics, and the Dominion-Provincial conferences on vital statistics held in June and December, 1918.

At the conferences of 1918, it was agreed: (1) that the model Vital Statistics Act prepared by the Dominion Bureau of Statistics, when accepted by the legislatures, should form the basis of the vital statistics legislation of the several provinces, thus securing uniformity and comparability; (2) that the provinces should undertake to obtain the returns of births, marriages and deaths on the prescribed forms as approved and adopted at the December Conference, the Dominion Bureau of Statistics to supply the forms free of charge; (3) that the provinces should forward to the Dominion Bureau of Statistics, at such times as might be agreed upon, either the original return of births, marriages and deaths, or certified transcriptions of the same; the Dominion Bureau of Statistics to undertake the mechanical compilation and tabulation of the same.

Under the scheme outlined above, the vital statistics of all the provinces, except Quebec, have been secured and compiled on a uniform basis for the year 1920, and with the commencement of 1921, it became possible to issue complete monthly statements for the eight provinces. The first annual report to be issued will be a report for the year 1921.



Summary statistics showing the births, marriages and deaths in the nine provinces of Canada during 1920, with the birth, marriage and death rates as compared with the estimated population of that year are presented in Table 17. The figures for Quebec are taken from the provincial returns. The totals for the nine provinces are approximately equivalent to what they would be for the Dominion as a whole, since the Yukon Territory and the Northwest Territories, which are not as yet covered by the new scheme of vital statistics, contain between them less than 1-700th of the population of the Dominion. This summary table shows births, marriages, deaths, crude annual birth, marriage and death rates for the provinces, based upon the estimated population for 1920, as well as the excess of births over deaths. In Table 18 will be found an analysis of the birth statistics for the year, showing living births by sex, single births, births of twins and triplets, illegitimates, and still-births. The proportion of illegitimate to total living births in the eight provinces for which statistics were available was very low, 18 per 1,000.

In Table 19 are presented statistics of births, marriages and deaths in the principal cities of Canada for the calendar year 1920. Since the local estimates of population have been shown by experience to be sometimes seriously defective, the census populations, as shown by the Census of 1921, are included, and are taken as a basis for the determination of the annual natural increase per 1,000 population, this involving a slight under-estimate of the rate of natural increase.

Two important considerations should be borne in mind by the students who use either these tables or provincial reports for comparative purposes.

First, in spite of the improvements recently effected, registration generally, and the registration of births in particular, is not universally carried out. The great extent of the country, and the isolation of many of its inhabitants, partly account for this unsatisfactory situation.

Secondly, the great differences in the age and sex distribution of the population in different provinces, as shown by the Census of 1911, (these statistics are not yet available from the Census of 1921), make comparisons (of birth rates, for instance), as among the provinces unfair and misleading. Thus, for instance, in British Columbia in 1911, there were only 428 females of ages 15 to 49 to every 1,000 males of these ages, while in Quebec there were 972 and in Prince Edward Island 1,027. Evidently in view of the enormous disproportion between the sexes in British Columbia, the crude birth rate per 1,000 of population in that province cannot properly be compared with the crude birth rate in Quebec or Prince Edward Island. Again, in consequence of different age distributions of population in the different provinces—the Prairie Provinces, for instance, have a very young population because of the healthy young immigrants whom they attract—a comparison of crude death-rates of the provinces is misleading. In the Prairie Provinces, taken as a unit, only 126 per thousand of the 1911 population and 137 per thousand of the 1916 population had passed 45 years of age, while in Quebec 176,

in Ontario 218 and in Prince Edward Island 249 per thousand of the population were in 1911 over 45 years of age. These latter provinces, having a much larger proportion of persons of advanced ages, will inevitably have a higher crude death rate per thousand of population than the Prairie Provinces.

### 17.—Number of Births, Marriages and Deaths, by Provinces, 1920.

Provinces.	Births.	Birth-rate per 1,000 living.	Marriages.	Marriage rate per 1,000 living.	Deaths.	Death-rate per 1,000 living.	Excess of Births over Deaths.
P. E. Island.....	2,301	25.85	607	6.82	1,279	14.36	1,022
Nova Scotia.....	13,181	25.34	4,411	8.48	7,560	14.50	5,621
New Brunswick.....	10,778	28.08	3,780	9.85	5,628	14.66	5,150
Quebec.....	86,328	37.16	21,587	9.29	40,686	17.51	45,642
Ontario.....	72,297	25.02	29,361	10.16	40,410	13.98	31,887
Manitoba.....	18,322	30.62	6,068	10.14	6,511	10.88	11,811
Saskatchewan.....	22,839	31.07	5,320	7.24	5,918	8.05	16,921
Alberta.....	16,531	29.02	5,107	8.96	5,674	9.96	10,857
British Columbia.....	10,492	20.54	4,690	9.18	4,739	9.21	5,753
<b>Total for the nine provinces.....</b>	<b>253,069</b>	<b>29.36</b>	<b>80,931</b>	<b>9.39</b>	<b>118,405</b>	<b>13.74</b>	<b>134,664</b>

NOTE.—Birth, marriage and death rates for 1920 are calculated on the estimated population of 1920.

### 18.—Summary Analysis of Birth Statistics for the calendar year 1920.

Provinces.	Living Births.			Single Births.	Number Pairs of Twins.	Number Cases of Triplets.	Il-legiti-mates.	Still Births.
	Male.	Female.	Total.					
Prince Edward Island...	1,172	1,129	2,301	2,257	22	—	71	80
Nova Scotia.....	6,740	6,439	13,179	12,872	152	1	453	615
New Brunswick.....	5,578	5,200	10,778	10,549	113	1	234	310
Quebec.....	44,975	41,353	86,328	— <sup>1</sup>	— <sup>1</sup>	— <sup>1</sup>	— <sup>1</sup>	1,560
Ontario.....	37,044	35,253	72,297	70,655	791	20	1,287	3,364
Manitoba.....	9,399	8,923	18,322	17,845	231	5	328	623
Saskatchewan.....	11,836	11,003	22,839	22,221	303	4	219	653
Alberta.....	8,463	8,068	16,531	16,107	209	2	273	411
British Columbia.....	5,458	5,034	10,492	10,292	100	—	96	392
<b>Canada (exclusive of the Territories)....</b>	<b>130,655</b>	<b>122,402</b>	<b>253,057</b>	<b>182,798<sup>2</sup></b>	<b>1,921<sup>2</sup></b>	<b>33<sup>2</sup></b>	<b>3,061<sup>2</sup></b>	<b>8,008</b>

<sup>1</sup> These statistics are not available for the province of Quebec. <sup>2</sup> Partial totals for eight provinces, figures for Quebec not being available.

### 19.—Number of Births, Marriages and Deaths, by Principal Cities, during the calendar year 1920.

Cities.	Census Population, 1921.	Births.	Marriages.	Deaths.	Excess of Births over Deaths.	Natural Increase per 1,000 of Population.
<b>P. E. Island—</b>						
Charlottetown.....	10,814	320	—	277	43	3.98
<b>Nova Scotia—</b>						
Halifax.....	58,372	1,764	—	1,067	697	11.94
Sydney.....	22,545	524	—	319	205	9.09
Glace Bay.....	17,007	284	—	300	—16	—
Amherst.....	9,998	257	—	133	124	12.40
New Glasgow.....	8,974	246	—	105	141	15.71
<b>New Brunswick—</b>						
St. John.....	47,166	1,380	—	1,001	379	8.04
Moncton.....	17,488	624	—	288	336	19.21

**19.—Number of Births, Marriages and Deaths, by Principal Cities, during the calendar year 1920—concluded.**

Cities.	Census Population, 1921.	Births.	Marriages.	Deaths.	Excess of Births over Deaths.	Natural Increase per 1,000 of Population.
<b>Quebec—</b>						
Montreal.....	618,506	21,180	7,123	12,846	8,334	13.47
Quebec.....	95,193	3,823	926	2,043	1,780	18.70
Verdun.....	25,001	739	111	341	398	15.92
Hull.....	24,117	1,064	274	571	493	20.44
Sherbrooke.....	23,515	770	214	464	306	13.01
Three Rivers.....	22,367	915	258	497	418	18.69
Westmount.....	17,593	247	36	132	115	6.54
Lachine.....	15,404	538	79	224	304	19.73
Outremont.....	13,249	120	44	101	19	1.43
St. Hyacinthe.....	10,859	340	116	192	148	13.63
<b>Ontario—</b>						
Toronto.....	521,893	13,388	—	7,261	6,127	11.74
Hamilton.....	114,151	3,312	—	1,841	1,471	12.89
Ottawa.....	107,843	3,256	—	1,937	1,319	12.23
London.....	60,959	1,469	—	1,021	448	7.35
Windsor.....	38,591	1,225	—	603	622	16.12
Brantford.....	29,440	859	—	419	440	14.95
Kitchener.....	21,763	532	—	266	266	12.22
Kingston.....	21,753	687	—	522	165	7.59
Fort William.....	20,541	627	—	334	293	14.26
Peterborough.....	19,477	533	—	342	191	9.81
Sault Ste. Marie.....	21,082	605	—	298	307	14.56
St. Catharines.....	19,881	657	—	295	362	18.21
Guelph.....	18,128	422	—	366	56	3.09
Stratford.....	16,094	462	—	199	263	16.34
St. Thomas.....	16,026	417	—	225	192	11.98
Port Arthur.....	14,886	520	—	289	231	15.52
Sarnia.....	14,877	366	—	235	131	8.81
Niagara Falls.....	14,764	365	—	216	149	10.09
Chatham.....	13,256	385	—	270	115	8.63
Galt.....	13,216	337	—	158	179	13.54
Belleville.....	12,206	352	—	247	105	8.60
Owen Sound.....	12,190	334	—	190	144	11.81
Woodstock.....	9,935	191	—	154	37	3.72
<b>Manitoba—</b>						
Winnipeg.....	179,087	6,105	—	2,271	3,834	21.41
Brandon.....	15,397	521	—	249	272	17.67
St. Boniface.....	12,821	456	—	395	51	3.98
<b>Saskatchewan—</b>						
Regina.....	34,432	1,106	—	471	635	18.44
Saskatoon.....	25,739	904	—	332	572	22.22
Moosejaw.....	19,285	721	—	202	519	26.91
<b>Alberta—</b>						
Calgary.....	63,605	2,310	—	831	1,479	23.36
Edmonton.....	58,821	2,232	—	902	1,330	22.61
Lethbridge.....	11,097	433	—	186	247	22.26
Medicine Hat.....	9,634	446	—	175	271	28.13
<b>British Columbia—</b>						
Vancouver.....	117,217	3,061	—	1,658	1,403	11.97
Victoria.....	38,727	1,195	—	559	636	16.42
New Westminster.....	14,495	406	—	243	163	11.25

**IMMIGRATION.**

Immigration to Canada, as to other new countries, is generally greatest in "boom" periods, when capital as well as labour is leaving the older countries for the newer in order to secure the more remunerative investments generally to be found in virgin territories where the natural resources are still unexploited. In periods of depression, however, the sending abroad of both capital and labour is diminished, both preferring at such times to endure the evils which they know at home rather than take the risks of a new departure at a distance.

The above proposition is aptly illustrated by the statistics of Table 20, which show that during the past 25 years, immigration was at its minimum in the year of deepest depression, 1897, that it steadily increased from that time forward until 1908, that a decline took place in the fiscal year ended March 31, 1909, on account of the short depression of 1908, that thereafter immigration steadily increased till 1913, while the fiscal year ended March 31, 1914, showed a decline due to the depression which occurred in the year preceding the war. In the fiscal years 1915 to 1919 political rather than economic conditions restricted immigration, but with the expansion of business at the end of the war our immigration was more than doubled, while the depression which characterized the calendar year 1921 is reflected in the declining immigration of the fiscal year ended March 31, 1922. The improvement already visible in business conditions will undoubtedly be shortly reflected in increasing immigration.

Immigration has throughout Canadian history played a great part in reinforcing Canadian population, especially the English-speaking population. While the great majority of French-Canadians can trace their genealogy back to ancestors who left the Old World 200 or 250 years ago, or even longer—the great bulk of English-speaking Canadians are comparative newcomers both to Canada and to this continent, though a considerable number of the United Empire Loyalist families had been resident in the old colonies for generations before they moved north to establish English-speaking settlements in Canada. During the middle third of the nineteenth century there was a great English-speaking immigration which settled the province of Ontario and made it for the first time more populous than the sister province of Quebec, thus bringing about the agitation for representation by population. Thereafter immigration slackened until the dawn of the twentieth century brought another flood of immigrants to the newly opened territories of the Great North West, resulting in an increase of population between the censuses of 1901 and 1911 greater than the combined increase of the three decades from 1871 to 1901.

Immigration during the second decade of the twentieth century promised at its commencement to be even greater than during the first. In its first three years no fewer than 1,141,547 immigrants are reported as having entered Canada for purposes of settlement. If this rate had been maintained, the population of Canada in 1921 would certainly have been in excess of ten millions instead of being less than nine millions. The war, which commenced on August 4, 1914, dried up the sources of our immigrants in Great Britain and Continental Europe, where every able-bodied man was needed for the defence of his country. Immigrants from the United Kingdom in 1918 only numbered some 3,000 as compared with 150,000 in 1913: from Continental Europe immigrants numbered only about 3,000 in 1916 as compared with approximately 135,000 in 1914. Since the war, immigration, though increasing, has never approached that of the pre-war period, which is probably a fortunate circumstance, since the capital necessary to set in employment such great bodies of labourers as came to Canada in 1912 and 1913 could hardly have been secured.



Altogether, the total number of immigrants entering Canada between June 1, 1911 and June 1, 1921 (the dates of the two censuses), was 1,728,921, whereas the total increase of population between these dates was only 1,581,840. This clearly indicates a return movement of immigrants of very considerable proportions, especially as our vital statistics show a fairly high rate of natural increase of population, amounting to 134,664 in the calendar year 1920 (see Table 17 of this section), or at the rate of 15 per 1,000 of population per annum. Until accurate official statistics of emigration are secured, the demographic statistics of Canadian population, which have been so greatly improved in the immediate past by the collection of uniform and accurate vital statistics, must continue to be incomplete.

**Immigration Policy.**—The normal immigration policy of Canada, as is natural in so sparsely peopled a country, aims at attracting suitable immigrants from older and more densely settled countries, including above all, those ready to take part in the cultivation of the soil, whether farmers with capital or farm labourers, while female domestic servants, too, are always regarded as desirable immigrants, the demand for these latter being continuously greater than the supply. On the other hand, the immigration of persons mentally defective, of persons physically defective and without means of livelihood, of criminals and prostitutes, beggars and vagrants, alcoholics, revolutionaries, and of illiterates over 15 years of age unless belonging to a family already resident in Canada, is prohibited under the Immigration Act, which also provides in section 37 that immigrants may be required to possess a prescribed amount of money, and in section 38 that the Governor-General in Council may at any time prohibit the landing of immigrants coming otherwise than by continuous journey from their native country or that of which they are naturalized citizens, and may also prohibit temporarily or permanently the admission of immigrants belonging to any race or nationality or of immigrants of any specified class or occupation, on account either of economic conditions prevailing in Canada or of the unfitness of such persons for Canadian citizenship. An Order in Council issued under this clause on May 9, 1922, prohibited the landing of immigrants, unless it could be shown that the immigrant was an agriculturist, a farm labourer, or a female domestic servant. The immigration officer in charge was, however, allowed also to admit the wives and families of persons already settled in Canada, nationals of any country with which there is in operation a special treaty or convention regarding immigration, British subjects coming directly or indirectly from Great Britain or Ireland, the self-governing Dominions, Newfoundland and the United States of America, having money enough to maintain themselves until employment was secured, and finally American citizens whose labour or service was shown to be required in Canada. The Immigration Act also makes provision for the rejection and return of immigrants applying for admission to Canada and for the deportation of those misbehaving or becoming public charges within two years after admission.

**Oriental Immigration.**—The immigration to Canada of labourers belonging to the Asiatic races, able because of their low standard of living to underbid the white man in selling their labour, is fundamentally an economic rather than a racial problem, affecting most of all those portions of the country which are nearest to the East and the classes which feel their economic position threatened. As a result of the influx of Chinese into Canada, legislation was passed in 1885 (48-49 Vict., c. 71) providing that thereafter Chinese of the labouring class should be required as a condition of their entry into Canada to pay a head tax of \$50 each; on January 1, 1901 (63-64 Vict., c. 32), this amount was increased to \$100 and on January 1, 1904 (3 Edw. VII, c. 8) to \$500. This tax is paid by Chinese immigrants, with the exception of consular officers, merchants and clergymen and their families, tourists, men of science, students and teachers, a record showing the number of Chinese admitted who paid the tax, the number exempt from it, and the revenue realized being given by years from 1886 in Table 27. In recent years the number of Chinese immigrants entering Canada has been much reduced, owing to the operation of Orders in Council (renewed every six months from December 8, 1913, and replaced by an Order in Council of June 9, 1919) under which the landing in British Columbia of skilled and unskilled artisans and labourers is prohibited.

Japanese immigration to Canada was comparatively negligible prior to the Russo-Japanese war of 1904-5, but thereafter assumed considerable proportions, no fewer than 7,601 Japanese immigrants entering Canada, largely from Hawaii, in the fiscal year ended March 31, 1908, and settling mainly in British Columbia. In that year an agreement was made with the Japanese Government under which the latter undertook to limit the number of passports issued to Japanese emigrating to Canada, while the Canadian Government agreed to admit those possessing such passports, while prohibiting others from entering. The statistics of Table 28 show that in this way Japanese immigration has been effectively limited.

Hindoo immigration to Canada, like Japanese, is shown by the statistics of Table 28 to have been negligible down to 1907, when no fewer than 2,124 Hindoo immigrants arrived. However, as a consequence of the operation of section 38 of the Immigration Act of 1910, Hindoo immigration has since that date been comparatively small. A resolution of the Imperial War Conference of 1918 declared that "it is the inherent function of the Governments of the several communities of the British Commonwealth that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities." However, it was recommended that Indians already permanently domiciled in other British countries should be allowed to bring in their wives and minor children, a recommendation which was implemented, so far as Canada was concerned, by Order in Council of March 26, 1919. However, in the fiscal years ended March 31, 1921 and 1922, only 10 and 13 Hindoo immigrants respectively were admitted.

Under Order in Council of April 12, 1922, no immigrant of any Asiatic race is permitted to land in Canada who does not possess in his own right \$250; this regulation, however, does not apply where there is in operation a special treaty, agreement or convention regulating immigration.

**Immigration Statistics.**—Summary statistics of the number of immigrants entering Canada from the United Kingdom, the United States and other countries are furnished by years from 1897 to 1922, in Table 20, while immigrants of the last eight years are analyzed by nationalities in Table 21. Tables 22 and 23 deal respectively with rejections of immigrants on arrival and deportations after admission. In Table 24 statistics are presented of juvenile immigrants brought out by charitable organizations and the demand for their services. Tables 25 and 26 deal with the occupations and destinations of immigrants to Canada, Tables 27 and 28 with Chinese and other oriental immigration, while Table 29 states, on the basis of the figures of the Department of Finance, the expenditure on immigration by years since 1868.

20.—Number of Immigrant Arrivals in Canada, 1897-1921.

Fiscal Years.	Immigrant Arrivals from			Total.	Fiscal Years.	Immigrant Arrivals from			Total.
	United King- dom.	United States.	Other Coun- tries.			United King- dom.	United States.	Other Coun- tries.	
	No.	No.	No.	No.		No.	No.	No.	No.
1897 <sup>1</sup> .....	11,383	2,412	7,921	21,716	1910.....	59,790	103,798	45,206	208,794
1898 <sup>1</sup> .....	11,173	9,119	11,608	31,900	1911.....	123,013	121,451	66,620	311,084
1899 <sup>1</sup> .....	10,660	11,945	21,938	44,543	1912.....	138,121	133,710	82,406	354,237
1900 <sup>2</sup> .....	5,141	8,543	10,211	23,895	1913.....	150,542	139,009	112,881	402,432
1901.....	11,810	17,987	19,352	49,149	1914.....	142,622	107,530	134,726	384,878
1902.....	17,259	26,388	23,732	67,379	1915.....	43,276	59,779	41,734	144,789
1903.....	41,792	49,473	37,099	128,364	1916.....	8,664	36,937	2,936	48,537
1904.....	50,374	45,171	34,786	130,331	1917.....	8,282	61,389	5,703	75,374
1905.....	65,359	43,543	37,364	146,266	1918.....	3,178	71,314	4,582	79,074
1906.....	86,796	57,796	44,472	189,064	1919.....	9,914	40,715	7,073	57,702
1907 <sup>3</sup> .....	55,791	34,659	34,217	124,667	1920.....	59,603	49,656	8,077	117,336
1908.....	120,182	58,312	83,975	262,469	1921.....	74,262	48,059	26,156	148,477
1909.....	52,901	59,832	34,175	146,908	1922.....	39,020	29,345	21,634	89,999

<sup>1</sup> Calendar year. <sup>2</sup> Six months, January to June, inclusive. <sup>3</sup> Nine months ended March 31.

## 21.—Arrivals at Inland and Ocean Ports in Canada in Fiscal Years 1915-1922.

Nationalities.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
British—								
English.....	30,807	5,857	5,174	2,477	7,954	45,173	47,687	23,225
Irish.....	3,525	818	958	174	336	2,751	6,384	3,572
Scotch.....	8,346	1,887	2,062	473	1,518	10,997	19,248	11,596
Welsh.....	598	102	88	54	106	682	943	627
<b>Total British.....</b>	<b>43,276</b>	<b>8,664</b>	<b>8,282</b>	<b>3,178</b>	<b>9,914</b>	<b>59,503</b>	<b>74,262</b>	<b>39,020</b>
African, South.....	23	11	1	4	—	23	63	32
Arabian.....	—	—	—	—	—	—	8	5
Armenian.....	36	—	3	2	—	10	85	70
Australian.....	51	32	18	34	35	83	90	76
Austro-Hungarian—								
Austrian, N.E.S.....	7,150	15	1	—	2	5	26	14
Bohemian.....						3	—	—
Hungarian, N.E.S.....						—	23	48
Belgian.....	1,149	172	126	19	48	1,532	1,645	503
Bermudian.....	4	—	16	10	1	1	8	2
Brazilian.....	—	2	—	—	—	—	—	—
Bulgarian.....	4,048	1	—	—	—	—	—	—
Chinese.....	1,258	88	393	769	4,333	544	2,435	1,746
Cuban.....	1	1	3	1	—	2	—	—
Czecho-Slovak.....	—	—	—	—	—	1	308	152
Dutch.....	605	186	151	94	59	154	595	183
Egyptian.....	—	—	—	—	—	—	9	2
Finnish.....	459	139	249	113	2	44	1,401	274
French.....	1,206	180	199	114	222	1,584	861	332
German.....	2,472	27	9	1	1	12	137	178
Greek.....	1,147	145	258	45	4	39	357	209
Hebrew—								
Hebrew, N.E.S.....	266	18	28	2	15	32	920	2,336
" Austrian.....	160	1	—	—	—	—	1	1
" Polish.....	6	—	—	—	—	36	1,600	5,216
" Russian.....	2,674	46	108	30	7	48	242	851
Hindoo.....	—	1	—	—	—	—	10	13
Italian.....	6,228	388	758	189	49	1,165	3,880	2,413
Jamaican.....	29	9	6	24	2	3	18	13
Japanese.....	592	401	648	883	1,178	711	532	471
Jugo-Slav.....	—	—	—	—	—	—	89	180
Luxemburg.....	—	—	—	—	—	16	16	5
Macedonian.....	132	—	—	—	—	—	—	—
Maltese.....	19	4	109	144	2	405	140	34
Negro.....	202	34	98	35	22	61	144	42
Newfoundland.....	335	255	1,243	1,199	512	443	1,042	367
New Zealand.....	21	18	12	13	15	31	40	25
Persian.....	7	3	—	2	2	—	1	9
Polish—								
Polish, N.E.S.....	153	1	1	—	3	69	3,995	2,707
" Austrian.....	1,272	—	8	—	—	—	1	
" Russian.....	544	7	3	—	1	7	65	
Portuguese.....	8	—	1	1	—	3	4	—
Roumanian.....	361	4	4	—	—	21	969	759
Russian—								
Russian, N.E.S.....	5,201	40	25	42	42	51	1,077	321
Scandinavian—								
Danish.....	326	167	145	74	44	233	511	541
Icelandic.....	145	15	9	3	12	11	50	31
Norwegian.....	788	232	303	235	91	179	429	480
Swedish.....	916	177	332	156	101	241	715	442
Serbian.....	220	6	1	—	1	12	—	—
Spanish.....	755	11	76	28	12	15	202	6
Swiss.....	209	42	30	12	11	100	235	187
Turkish, etc.—								
Turkish, N.E.S.....	33	—	5	—	—	1	8	3
Syrian.....	79	3	9	2	—	18	443	123
Ukranian.....	—	—	—	—	—	—	491	89
U.S.A. Citizens, via ocean ports.....	41	15	20	28	21	55	110	67
West Indian.....	356	38	293	273	220	62	110	24
Other nationalities.....	44	1	1	1	1	5	11	25
<b>Total Continental, etc.....</b>	<b>41,734</b>	<b>2,933</b>	<b>5,703</b>	<b>4,582</b>	<b>7,073</b>	<b>8,077</b>	<b>26,156</b>	<b>21,634</b>
<b>From the U.S.A.....</b>	<b>59,779</b>	<b>36,937</b>	<b>51,389</b>	<b>71,314</b>	<b>40,715</b>	<b>49,556</b>	<b>48,059</b>	<b>29,345</b>
<b>Total Immigration.....</b>	<b>144,789</b>	<b>48,537</b>	<b>75,374</b>	<b>79,074</b>	<b>57,702</b>	<b>117,335</b>	<b>148,477</b>	<b>89,999</b>

N.E.S.—Not elsewhere specified.



### 22.—Rejections of Immigrants upon arrival at Ocean Ports and Deportations after admission, by principal causes, 1903-1921.

Principal Causes.	Number Rejected at Ocean Ports.											Total.
	1903-1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	
Accompanying patients.	353	53	28	76	58	4	8	1	—	9	13	603
Alien enemies.....	—	—	—	—	—	—	—	—	—	—	4	4
Bad character.....	562	112	80	102	56	17	4	11	2	1	9	956
Contract labour.....	84	3	—	—	—	—	—	—	4	1	—	92
Criminality.....	56	5	4	3	2	4	—	1	1	3	14	93
Head tax.....	—	6	—	—	—	—	—	—	—	—	—	6
Lack of funds.....	1,225	246	204	994	452	38	55	19	10	28	255	3,526
Likely to become a public charge.....	1,548	164	56	76	71	55	55	19	27	125	236	2,432
Medical causes.....	3,578	256	328	398	319	34	30	12	19	21	99	5,094
Not complying with regulations.....	121	119	55	178	40	11	22	8	7	474	291	1,326
Previously rejected.....	1	8	1	—	—	—	—	—	—	—	—	10
Unskilled labour, B.C..	—	—	—	—	—	—	—	—	—	—	32	32
<b>Totals.....</b>	<b>7,528</b>	<b>972</b>	<b>756</b>	<b>1,827</b>	<b>998</b>	<b>163</b>	<b>174</b>	<b>71</b>	<b>70</b>	<b>662</b>	<b>953</b>	<b>14,174</b>

Principal Causes.	Number Deported after Admission.											Total.
	1903-1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	
Accompanying patients.	112	17	16	10	34	5	9	39	10	18	37	307
Bad character.....	221	120	165	159	128	68	60	84	35	22	52	1,114
Criminality.....	507	242	334	376	404	329	277	274	236	334	586	3,899
Medical causes.....	1,697	229	370	570	379	206	98	39	70	123	133	3,914
Not complying with regulations.....	12	8	4	4	—	—	—	—	—	—	—	28
Public charges.....	2,118	343	392	715	789	635	161	91	103	158	236	5,741
<b>Totals.....</b>	<b>4,667</b>	<b>959</b>	<b>1,281</b>	<b>1,834</b>	<b>1,734</b>	<b>1,243</b>	<b>605</b>	<b>527</b>	<b>454</b>	<b>655</b>	<b>1,044</b>	<b>15,003</b>

### 23.—Number by Nationalities of Immigrants Deported after Admission, 1903-1921.

Nationalities.	Deported after Admission.											Total.
	1903-1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	
British.....	3,259	540	559	952	877	602	186	36	99	184	295	7,589
American.....	433	256	377	405	461	437	324	407	279	392	616	4,887
Other countries.....	975	163	345	477	396	204	95	84	76	79	133	3,027
<b>Totals.....</b>	<b>4,667</b>	<b>959</b>	<b>1,281</b>	<b>1,834</b>	<b>1,734</b>	<b>1,243</b>	<b>605</b>	<b>527</b>	<b>454</b>	<b>655</b>	<b>1,044</b>	<b>15,003</b>

### 24.—Juvenile Immigrants and Applications for their Services, 1901-1921.

Fiscal Year.	Juvenile immigrants.	Applications for their services.	Fiscal Year.	Juvenile immigrants.	Applications for their services.
	No.	No.		No.	No.
1901.....	977	5,783	1912.....	2,689	31,040
1902.....	1,540	8,587	1913.....	2,642	33,493
1903.....	1,979	14,219	1914.....	2,318	32,417
1904.....	2,212	16,573	1915.....	1,899	30,854
1905.....	2,814	17,833	1916.....	821	31,725
1906.....	3,258	19,374	1917.....	251	28,990
1907 <sup>1</sup> .....	1,455	15,800	1918.....	—	17,916
1908.....	2,375	17,239	1919.....	—	11,718
1909.....	2,424	15,417	1920.....	155	10,235
1910.....	2,422	18,477	1921.....	1,426	19,841
1911.....	2,524	21,768	<b>Total.....</b>	<b>36,181</b>	<b>419,299</b>

NOTE.—The above are included in the total number of immigrants recorded elsewhere.  
<sup>1</sup>Nine months.

**25.—Occupation and Destination of Total Immigrant Arrivals in Canada for the Fiscal Years 1920 and 1921.**

Description.	1920.			1921.		
	Via Ocean Ports.	From the United States.	Totals.	Via Ocean Ports.	From the United States.	Totals.
Farmers and farm labourers—						
Men.....	5,037	13,561	18,598	15,604	11,122	26,726
Women.....	2,267	3,932	6,199	4,085	2,980	7,065
Children.....	1,542	4,943	6,485	4,027	3,645	7,672
General labourers—						
Men.....	1,897	2,686	4,583	6,736	5,345	12,081
Women.....	958	646	1,604	1,920	1,166	3,086
Children.....	559	626	1,185	1,206	908	2,114
Mechanics—						
Men.....	2,655	6,136	8,791	9,217	6,234	15,451
Women.....	1,514	1,844	3,358	4,171	1,244	5,415
Children.....	940	1,551	2,491	2,297	1,135	3,432
Clerks, traders, etc.—						
Men.....	947	1,034	1,981	3,916	1,917	5,833
Women.....	890	519	1,409	1,973	820	2,793
Children.....	186	229	415	513	375	888
Miners—						
Men.....	331	343	674	1,591	427	2,018
Women.....	120	50	170	303	58	361
Children.....	118	41	159	348	59	407
Domestics—						
Women.....	4,978	1,076	6,054	9,432	1,010	10,442
Not classified—						
Men.....	3,311	2,934	6,245	5,983	2,716	8,699
Women.....	26,928	4,284	31,212	16,191	4,024	20,215
Children.....	12,502	3,221	15,723	10,905	2,874	13,779
Totals—						
Men.....	14,178	26,694	40,872	43,047	27,761	70,808
Women.....	37,655	12,351	50,006	38,075	11,302	49,377
Children.....	15,847	10,611	26,458	19,296	8,996	28,292
<b>Totals.....</b>	<b>67,680</b>	<b>49,656</b>	<b>117,336</b>	<b>100,418</b>	<b>48,059</b>	<b>148,477</b>
Destination—						
Maritime Provinces.....	3,169	2,385	5,554	4,132	2,221	6,353
Quebec.....	7,273	5,805	13,078	14,019	7,081	21,100
Ontario.....	27,405	11,939	39,344	49,103	13,469	62,572
Manitoba.....	6,899	4,488	11,387	8,289	4,360	12,649
Saskatchewan.....	6,264	8,023	14,287	7,335	6,057	13,392
Alberta.....	6,717	13,283	20,000	7,097	10,684	17,781
British Columbia.....	9,945	3,601	13,546	10,439	4,078	14,517
Yukon.....	8	132	140	4	109	113

**26.—Destination of Immigrants into Canada, by Provinces, 1901-1921.**

Fiscal Year.	Maritime Prov.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon Terr'y.	Not shown.	Totals.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
1901.....	2,144	10,216	6,208	11,254	14,160		2,600	2,567	49,149
1902.....	2,312	8,817	9,798	17,422	22,199		3,483	3,348	67,379
1903.....	5,821	17,040	14,854	39,535	43,898		5,378	1,838	128,364
1904.....	5,448	20,222	21,266	34,911	40,397		6,994	1,093	130,331
1905.....	4,128	23,666	35,811	35,387	39,289		6,008	1,977	145,266
1906.....	6,381	25,212	52,746	35,648	28,728	26,177	12,406	1,766	189,064
1907 (9 mos.).....	6,510	18,319	32,654	20,273	15,307	17,559	13,650	395	124,667

## 26.—Destination of Immigrants into Canada, by Provinces, 1901-1921—concluded.

Fiscal Year.	Maritime Prov.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon Terr'y.	Not shown.	Totals.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
1908.....	10,360	44,157	75,133	39,789	30,590	31,477	30,768	195	262,469
1909.....	6,517	19,733	29,265	19,702	22,146	27,651	21,862	32	146,908
1910.....	10,644	28,524	46,129	21,049	29,218	42,509	30,721	—	208,794
1911.....	13,236	42,914	80,035	34,653	40,763	44,782	54,701	—	311,084
1912.....	15,973	50,602	100,227	43,477	46,168	45,957	51,843	—	354,237
1913.....	19,806	64,835	122,798	43,813	45,147	48,073	57,960	—	402,432
1914.....	16,730	80,368	123,792	41,640	40,999	43,741	37,608	—	384,878
1915.....	11,104	31,053	44,873	13,196	16,173	18,263	10,127	—	144,789
1916.....	5,981	8,274	14,743	3,487	6,001	7,215	2,836	—	48,537
1917.....	5,710	10,930	26,078	5,247	9,874	12,418	5,117	—	75,374
1918.....	5,247	9,059	23,754	6,252	12,382	16,821	5,559	—	79,074
1919.....	3,860	6,772	13,826	4,862	8,552	11,640	8,190	—	57,702
1920.....	5,554	13,078	39,344	11,387	14,287	20,000	13,686	—	117,336
1921.....	6,353	21,100	62,572	12,649	13,392	17,781	14,630	—	148,477
<b>Totals.....</b>	<b>169,819</b>	<b>554,891</b>	<b>975,906</b>	<b>495,683</b>	<b>971,724</b>	<b>396,127</b>	<b>13,211</b>	<b>3,577,311</b>	

## 27.—Record of Chinese Immigration, 1886-1921.

Fiscal Year.	Paying tax.	Exempt from tax.	Percentage of total arrivals admitted exempt from tax.	Registration for leave.	Total Revenue.
	No.	No.	p.c.	No.	\$
1886-91.....	4,590	222	4.61	7,041	239,664
1892.....	3,276	6	0.18	2,168	166,503
1893.....	2,244	14	0.62	1,277	113,491
1894.....	2,087	22	1.04	666	105,021
1895.....	1,440	22	1.50	473	72,475
1896.....	1,762	24	1.34	697	88,500
1897.....	2,447	24	0.97	768	123,119
1898.....	2,175	17	0.78	802	109,754
1899.....	4,385	17	0.39	859	220,310
1900.....	4,231	26	0.61	1,102	215,102
1901.....	2,518	26	1.02	1,204	178,704
1902.....	3,525	62	1.73	1,922	364,972
1903.....	5,245	84	1.58	2,044	526,744
1904.....	4,719	128	2.64	1,920	474,420
1905.....	8	69	89.61	2,080	6,080
1906.....	22	146	86.90	2,421	13,521
1907 <sup>1</sup> .....	91	200	68.73	2,594	48,094
1908.....	1,482	752	33.67	3,535	746,535
1909.....	1,411	695	33.00	3,731	713,131
1910.....	1,614	688	29.89	4,002	813,003
1911.....	4,515	805	15.13	3,956	2,262,056
1912.....	6,083	498	7.57	4,322	3,049,722
1913.....	7,078	367	4.93	3,742	3,549,242
1914.....	5,274	238	4.32	3,450	2,644,593
1915.....	1,155	103	8.19	4,373	588,124
1916.....	20	69	77.53	4,064	19,389
1917.....	272	121	30.78	3,312	140,487
1918.....	650	119	15.47	2,907	336,257
1919.....	4,066	267	6.16	3,244	2,069,669
1920.....	363	181	33.27	5,529	538,479
1921.....	885	1,550	63.66	6,807	474,332
<b>Totals.....</b>	<b>79,633</b>	<b>7,562</b>	<b>8.57</b>	<b>87,012</b>	<b>21,011,793</b>

<sup>1</sup> Nine months.

## 28.—Record of Oriental Immigration, 1901-1922.

Fiscal Year.	Chi- nese.	Japan- ese.	Hin- doos.	Total.	Fiscal Year.	Chi- nese.	Japan- ese.	Hin- doos.	Total.
	No.	No.	No.	No.		No.	No.	No.	No.
1901.....	2,544	6	—	2,550	1912.....	6,581	765	3	7,349
1902.....	3,587	—	—	3,587	1913.....	7,445	724	5	8,174
1903.....	5,329	—	—	5,329	1914.....	5,512	856	88	6,456
1904.....	4,847	—	—	4,847	1915.....	1,258	592	—	1,850
1905.....	77	354	45	476	1916.....	89	401	1	491
1906.....	168	1,922	387	2,477	1917.....	393	648	—	1,041
1907 <sup>1</sup> .....	291	2,042	2,124	4,457	1918.....	769	883	—	1,652
1908.....	2,234	7,601	2,623	12,458	1919.....	4,333	1,178	—	5,511
1909.....	2,106	495	6	2,607	1920.....	544	711	—	1,255
1910.....	2,302	271	10	2,583	1921.....	2,435	532	10	2,977
1911.....	5,320	437	5	5,762	1922.....	1,746	471	13	2,230
					<b>Total.....</b>	<b>59,910</b>	<b>20,889</b>	<b>5,320</b>	<b>86,119</b>

## 29.—Expenditure on Immigration in the Fiscal Years 1868-1921.

(Compiled from the Public Accounts.)

Year.	\$	Year.	\$	Year.	\$	Year.	\$
1868.....	36,050	1882.....	215,339	1896.....	120,199	1910.....	960,676
1869.....	26,952	1883.....	373,958	1897.....	127,438	1911.....	1,079,130
1870.....	55,966	1884.....	511,209	1898.....	261,195	1912.....	1,365,000
1871.....	54,004	1885.....	423,861	1899.....	255,879	1913.....	1,427,112
1872.....	109,954	1886.....	257,355	1900.....	434,563	1914.....	1,893,298
1873.....	265,718	1887.....	341,236	1901.....	444,730	1915.....	1,658,182
1874.....	291,297	1888.....	244,789	1902.....	494,842	1916.....	1,307,480
1875.....	278,777	1889.....	202,499	1903.....	642,914	1917.....	1,181,991
1876.....	338,179	1890.....	110,092	1904.....	744,788	1918.....	1,211,954
1877.....	309,353	1891.....	181,045	1905.....	972,357	1919.....	1,112,079
1878.....	154,351	1892.....	177,605	1906.....	842,668	1920.....	1,388,185
1879.....	186,403	1893.....	180,677	1907 <sup>1</sup> .....	611,201	1921.....	1,688,961
1880.....	161,213	1894.....	202,235	1908.....	1,074,697	<b>Total.....</b>	<b>30,380,866</b>
1881.....	214,251	1895.....	195,653	1909.....	979,326		

Nine months.



## VI.—EDUCATION.

### GENERAL FEATURES OF CANADIAN EDUCATION SYSTEMS.

Under the British North America Act, 1867, the right to legislate on matters respecting education was reserved exclusively to the provincial legislatures, subject to the maintenance of the rights and privileges of the denominational and separate schools as existing at the time of union or admission of provinces. In Ontario, Roman Catholics, Protestants and coloured people have each the right to establish "Separate Schools" for elementary education, the local rates for the support of these schools being separately levied and applied. In Quebec, the religious minority in any municipality, whether Roman Catholic or Protestant (the Jews being "Protestants" for all the purposes of the School Law), may dissent and maintain its own elementary and model schools and academies or high schools, the taxation of the minority being separate from that of the majority for the three classes of school, except that in the case of the assessment of corporations, the taxes are levied by the majority and divided between the majority and minority in proportion to the number of children of school age. In Saskatchewan and Alberta a separate school may be established by the minority, whether Protestant or Roman Catholic, subject, however, to identical regulations as to courses, certificates, inspection, etc. In the remaining provinces there are special provisions for the education of Roman Catholics in the larger cities and towns.

In all the provinces the cost of education is defrayed from the public revenues, provincial and local, and public elementary education is free to parents or guardians, except for certain small fees which are payable in parts of the province of Quebec. What is understood in most provinces as secondary education, that is, work of high school grade, is also either free or subject to fees so small as to be seldom or never prohibitive. With the exception of Quebec all the provinces have laws providing for compulsory education, but under conditions that differ as between one province and another. As a rule, the provincial laws provide for uniformity in the training of teachers, the use of text books and the grading of pupils. Secondary schools or departments under government control and colleges or universities for higher education, exist in all the provinces, and the three classes of teaching institution are more or less co-ordinated to allow of natural transition from the lower to the higher. Arrangements for the superannuation of teachers are applied in most of the provinces.

Recent movements in the direction of nature study, manual instruction, school gardens, agriculture, domestic science and technical education are all energetically in progress.

**HIGHER EDUCATION IN CANADA.**

Higher education in Canada is provided for by a number of universities and colleges. Of the universities, Toronto, McGill (Montreal), and the University of Montreal, are the largest. The oldest university in Canada, viz., King's College, Windsor, Nova Scotia, dates from 1789, and claims to be also the oldest university in His Majesty's Overseas Dominions. Several of the universities are affiliated to the older universities of the mother country, viz., Oxford, Cambridge and Dublin, whilst some of the smaller Canadian universities, as well as most of the colleges, in Ontario and Quebec are affiliated to either Toronto or McGill. In the West, provincial universities have been established for Manitoba at Winnipeg (1877), Saskatchewan at Saskatoon (1907), Alberta at Edmonton (1906) and British Columbia at Vancouver (1907), while in the East, Toronto (1827) and New Brunswick (1800) are provincial universities.

Some of the universities and colleges are under the control of religious denominations, as follows:—

Anglican or Church of England in Canada:—Kings' College, Windsor, N.S.; University of Bishop's College, Lennoxville, Quebec; University of Trinity College, Toronto; Wycliffe College, Toronto; and Emmanuel College, Saskatoon.

Roman Catholic Church:—St. Dunstan's University, Charlottetown, P.E.I.; University of St. Francis Xavier, Antigonish, N.S.; University of St. Joseph's College, St. Joseph, N.B.; Laval University, Quebec; University of Montreal, Montreal; University of Ottawa, Ottawa; St. Michael's College, Toronto.

Other Denominations:—Knox College, Toronto (Presbyterian); Mount Allison University, Sackville, N.B., Victoria University, Toronto, and Wesley College, Winnipeg (Methodist); Acadia University, Wolfville, N.S., McMaster University, Toronto, and Brandon College, Brandon, Manitoba (Baptist).

**EDUCATION STATISTICS OF CANADA.**

**Statistics of Public Schools.**—In the Tables numbered 1 to 11 an attempt is made to bring together by provinces (1) the number of publicly controlled schools, teachers and pupils, with the average attendance of the pupils; (2) the number of teachers and pupils in normal schools for the training of teachers; (3) statistics of secondary schools so far as they are separately given; (4) the statistics of vocational schools under public control; (5) the amount of receipts and expenditure for public education under the school law of each province and (6) the average annual salaries of teachers by provinces.

In Tables 1 and 2 the number of schools, teachers and pupils in all the provinces includes both elementary and secondary schools or grades; in Nova Scotia, New Brunswick and Saskatchewan the term "school" has a technical significance, being applied to a class with one teacher, irrespective of the number of classes in a school building. The classical colleges of Quebec are not included in Table 2

but are given later in Table 4. In Manitoba the sex of the pupils is not separately distinguished. Statistics of secondary schools are separately available for Ontario, British Columbia and Saskatchewan. They are given in Tables 5, 6, 7 and 8. The academies of Quebec take up both the elementary and secondary grades of school work, and are not all classed in the reports as secondary schools. Statistics of teachers in training in seven of the nine provinces are given for the years 1901-1921 in Table 3.

**Growth of Expenditure on Public Education.**—Probably the most remarkable feature of these statistics is the extraordinary growth during the present century of the expenditure upon public education. In 1901, the first year of the century, the total expenditure for the purposes of public education in Canada was \$11,751,625; in 1921 or the latest year reported, as shown by Table 1, it was \$102,561,425, an increase of \$90,809,800, or 773 p.c.

**Statistics of Higher Education.**—In Tables 12-20 are presented statistical particulars relating to the universities and colleges of Canada, which are summarized from information furnished by each of the institutions mentioned. Tables 12 and 17 give the dates of foundation, the affiliation, the faculties and degrees; Tables 13, 14 and 18, the number of teaching staff and students, and Tables 16 and 19, statistics of property, income and expenditure. For the 23 universities in Table 16 the total value of the endowments and property in land, buildings, equipment, etc., amounts to \$59,282,456. For 22 of these universities the total income amounts to \$6,737,816, of which \$1,771,586 is derived from fees and the balance from investments, government grants and other sources. The total expenditure of the same universities amounts to \$8,018,440. The total number of students attending the 23 universities of Canada in the academic year 1920-21, as shown by Table 16, was 35,342. Adding to these the 20,486 students attending colleges having students doing work of university grade in the same year, and excluding 12,749 duplicates who are registered at both the universities and colleges, the grand total of students in attendance at Canadian institutions of higher education was 43,079.

#### TECHNICAL EDUCATION IN CANADA.

Technical Education in State Schools is a comparatively new institution. Until recently, vocational training was undertaken after the completion of or at the expense of academic education.

Among the first technical courses to be introduced into schools were commercial courses. Courses designed to fit pupils for business careers were introduced into the high school curricula of Ontario and Manitoba in 1899, of British Columbia in 1905, and Saskatchewan and Alberta about the same time, while the classical colleges of Quebec have long provided business courses and a school for higher commercial studies was founded at Montreal in 1907.



Agriculture was at first taught in colleges, which provided training for teachers who carried the subject into the schools. Apart from certain schools in Quebec and industrial schools having farms attached in other provinces, the study of agriculture in elementary and secondary day schools has hitherto been confined to school gardens and lessons on the science of agriculture.

Training in handicrafts was introduced into the school in the form of manual training for boys and domestic science for girls. The former was originally intended merely as a training in the use of tools, affording an agreeable diversion from the ordinary school work, and a means by which the boy could gain some idea of his mechanical capacities. A form of manual training was introduced into Ontario schools in 1883, and in 1891 into Nova Scotia, where it was made compulsory for teachers in training in 1893, and into the western provinces in the early years of this century. By 1915, manual training courses in Ontario had branched out into industrial, technical and art schools, and in that year a large Technical School was opened in Toronto. Evening technical classes, which were organized in nearly all the provinces in the first years of the century, carried out a scheme of actual vocational courses. Such courses were for some time given by certain day schools in Quebec. The idea of part time day vocational courses is new to Canada. The Adolescent Act passed in Ontario in 1919, makes part time attendance compulsory for adolescents from 14 to 18 years of age who have not attained matriculation standing or are not attending full time. By 1919, commercial, agricultural and domestic science courses were operating in all provinces and other technical courses in all but Prince Edward Island.

In 1919, the Dominion Parliament passed an Act offering assistance to the provinces in promoting technical education and a Director of Technical Education was appointed under the Minister of Labour. The provincial governments accepted the offer and a technical education officer has been appointed in all but two provinces. The benefits of the Act are extended to persons over 14 years who are not provided for by the ordinary day schools; the agreement also excludes agricultural studies, the training of nurses and teachers for ordinary schools and all work of university grade. The expenditure in 1920-21 on technical education by local boards was about \$2,064,563, by provincial governments \$1,158,051 and by the federal government \$585,469. Details of teaching staff and enrolment of students are given in Table 9 on page 147. This table does not include all the pupils or students in technical schools or courses in the different provinces, but only those of such schools as come under the Act. Statistics of agricultural education, to which the Dominion contributes under the Agricultural Instruction Act, are given in the Agricultural section (see "Agricultural Instruction Act" in the index). Statistics of Indian education are given in the Administration section (see "Indians, school attendance of," in index).



## 1.—Statistical Summary of Education in Canada,

## NUMBER OF PUPILS ATTENDING

No.	Type of Institution.	P.E.I.	N.S.	N.B.	Quebec.
1.	Ordinary day schools under public control .....	17,510	109,483	73,712	453,512
2.	Agricultural, Commercial, Industrial and other Technical Schools, including short courses in universities and colleges and all evening schools .....	145	3,399	1,755	21,192
3.	Normal schools for teacher-training .....	—	241	216	1,376
4.	Indian schools .....	42	246	264	1,334
5.	Schools for the blind and deaf <sup>1</sup> .....	—	308	—	579
6.	Classical colleges .....	—	—	—	9,033
7.	Affiliated and professional colleges (including regular courses of agricultural and other technical colleges) .....	241	765	—	5,381
8.	Universities (regular courses) .....	241	1,468	797	4,775
9.	Business Colleges (private) .....	—	1,226	811	5,147
10.	Other private schools under college grade .....	260	2,072	532	50,708
	<b>Grand Total (exclusive of duplicates) .....</b>	<b>18,439</b>	<b>119,208</b>	<b>78,087</b>	<b>552,273<sup>2</sup></b>
	<b>Population of 1921 .....</b>	<b>88,615</b>	<b>523,837</b>	<b>387,876</b>	<b>2,361,199</b>

## DISTRIBUTION OF PUPILS IN ORDINARY DAY

No.		P.E.I.	N.S.	N.B.	Quebec.
1.	Number of boys enrolled .....	8,913	54,355	33,615	239,648
2.	Number of girls enrolled .....	8,597	55,128	34,477	256,239
3.	Total in elementary grades .....	16,325	99,778	65,832	472,564
4.	Boys in elementary grades .....	—	50,930	—	—
5.	Girls in elementary grades .....	—	48,848	—	—
6.	Total in secondary grades .....	972	9,705	2,270	9,633 <sup>3</sup>
7.	Boys in secondary grades .....	—	3,425	—	—
8.	Girls in secondary grades .....	—	6,280	—	—
9.	Number of pupils in graded schools .....	—	69,020	34,350	—
10.	Number of pupils in ungraded schools .....	—	40,463	33,742	—
11.	Number of pupils in rural schools .....	—	—	—	—
12.	Number of pupils in village, town and city schools .....	—	—	—	—

## ATTENDANCE OF PUPILS IN ELEMENTARY AND

No.		P.E.I.	N.S.	N.B.	Quebec.
1.	Aggregate number of days attended during the year .....	—	14,658,404	9,335,052	—
2.	Average number attending each day .....	11,446	73,238	49,655	372,377
3.	Average number of days schools were open during year .....	—	192	188	—
4.	Average number of days pupils attended during year .....	—	134	127	—
5.	Percentage of average attendance to total attendance .....	65.36	66.88	67.35	75.09
6.	Percentage proportion of secondary to elementary grades .....	5.95	9.93	3.45	—

<sup>1</sup> The blind and deaf of Prince Edward Island and New Brunswick are accommodated at the institute are accommodated at the Institution for the Blind in Brantford, Ont., by arrangement between Saskatchewan and Alberta are accommodated at the School for the Deaf in Winnipeg, Man.

<sup>2</sup> Excluding 764 students of university grade attending classical colleges, already included with

<sup>3</sup> These are exclusive of classical colleges, convents and other independent institutions, which are Roman Catholic primary schools and the 9th, 10th and 11th years of the Protestant schools.

## by Provinces, 1921, or latest year reported.

## EDUCATIONAL INSTITUTIONS.

Ontario.	Manitoba.	Sask.	Alberta.	B.C.	Yukon, N.W.T., etc.	Total for Canada.	No.
604,923	129,015	174,925	135,750	85,950	-	1,784,780	1
40,279	6,234	1,234	4,171	4,970	-	83,379	2
2,221	642	723	694	-	-	6,113	3
3,590	1,944	1,337	1,033	2,393	375	12,558	4
416	164	-	-	51	-	1,518	5
-	-	-	-	-	-	9,033	6
4,441	1,435	62	883	298	-	13,506	7
11,231	1,353	984	1,106	962	-	22,917	8
13,992	3,473	521	2,216	1,923	-	29,309	9
6,970	911	3,386	2,274	988	-	68,101	10
686,344	145,171	183,172	148,127	97,535	375	2,030,450 <sup>2</sup>	
2,933,662	610,118	757,510	588,454	524,582	12,630	8,788,483	

## SCHOOLS UNDER PUBLIC CONTROL.

Ontario.	Manitoba.	Sask.	Alberta.	B.C.	Yukon, N.W.T., etc.	Total for Canada.	No.
302,887	-	89,993	68,045	43,442	-	840,898	1
302,036	-	85,932	67,705	42,508	-	852,622	2
558,804	120,460	164,629	126,602	78,691	-	1,703,685	3
285,362	-	-	-	40,349	-	-	4
279,610	-	-	-	38,342	-	-	5
46,119	8,615	10,296	9,148	7,259	-	104,017	6
17,525	-	-	-	3,093	-	-	7
22,426	-	-	-	4,166	-	-	8
-	93,503	76,822	75,864	69,231	-	-	9
-	35,512	98,103	59,886	16,719	-	-	10
226,444	-	98,103	59,886	39,041	-	-	11
378,479	-	76,822	75,864	46,909	-	-	12

## SECONDARY SCHOOLS UNDER PUBLIC CONTROL.

Ontario.	Manitoba.	Sask.	Alberta.	B.C.	Yukon, N.W.T., etc.	Total for Canada.	No.
-	16,929,665	20,075,534	15,082,258	-	-	-	1
396,141	86,137	106,997	82,417	68,498	-	1,241,264	2
-	196.50	188	183	-	-	-	3
-	142.19	115	111	-	-	-	4
65.48	66.80	61.16	60.71	79.70	-	67.58	5
8.25	7.15	6.25	7.23	9.22	-	-	6

tions in Halifax, N.S., by arrangement with that province; the blind of the three prairie provinces the different prairie provinces and Ontario; by a similar arrangement with Manitoba, the deaf of

item 7.

the real secondary institutions of Quebec. The 9,633 above are those in the 7th and 8th years of the

## 1.—Statistical Summary of Education in Canada by

## TEACHERS AND ACCOMMODATION IN SCHOOLS

No.		P.E.I.	N.S.	N.B.
1.	Teachers in schools under public control.....	591	3,089	2,142
2.	Male teachers.....	103	203	155
3.	Female teachers.....	488	2,886	1,987
4.	Number of school districts.....	461	1,779	1,291
5.	Number of school houses.....	461	1,787	1,973
6.	Number of class-rooms in operation.....	590	2,898	1,984
7.	Number of graded class-rooms in operation.....	—	1,500	823
8.	Number of ungraded one-room schools.....	—	1,398	1,161
9.	Average number of pupils to a class-room.....	29.68	38.1	37.15

## EXPENDITURE IN SCHOOLS

No.		P.E.I.	N.S.	N.B.	Quebec.
		\$	\$	\$	\$
1.	Total expenditure on education.....	396,778	3,442,546	2,278,622	19,201,405
2.	Total expenditure on education by Governments.....	244,347	576,591	352,693	2,334,108
3.	Total expenditure on education by ratepayers, etc.....	152,431	2,865,955	1,925,929	16,867,297
4.	Expenditure on secondary schools.....	—	—	—	—
5.	Expenditure on elementary schools.....	—	—	—	—
6.	Expenditure on teachers' salaries.....	—	—	—	—
7.	Expenditure on teachers' salaries in secondary schools.....	—	—	—	—
8.	Expenditure on teachers' salaries in elementary schools...	—	—	—	—
9.	Average annual cost per pupil enrolled.....	22.66	31.44	30.91	36.00
10.	Average annual cost per pupil in average attendance.....	34.67	47.00	45.81	51.57

1 School Municipalities: the number of school "districts" during the same year was 7,259.

Provinces, 1921, or latest year reported—concluded.

UNDER PUBLIC CONTROL.

Quebec.	Ontario.	Manitoba.	Sask.	Alta.	B.C.	Total for Canada.	No.
16,710	15,331	3,708	6,809	5,014	2,557	55,951	1
2,548	2,164	796	1,477	1,161	572	9,179	2
14,162	12,836	2,912	5,332	3,853	1,985	46,441	3
1,718 <sup>1</sup>	—	2,077	4,344	3,154	665	—	4
7,481	7,042	1,893	4,200	2,826	922	28,585	5
13,042	15,331	3,596	5,565	4,289	2,557	49,852	6
—	—	—	—	1,700	1,846	—	7
—	—	—	—	2,589	—	—	8
29·6	39·46	35·88	32·6	31·6	37·5	34·4	9

UNDER PUBLIC CONTROL.

Ontario.	Manitoba.	Sask.	Alberta.	B.C.	Indian schools.	Total for Canada.	No.
\$	\$	\$	\$	\$	\$	\$	
30,626,435	13,079,205	14,609,665	10,644,329	7,170,030	1,112,410	102,561,425	1
2,413,996	822,186	1,337,067	885,524	2,931,572	—	11,898,084	2
28,212,439	12,257,019	13,272,598	9,758,805	4,238,458	—	89,550,931	3
5,409,923	—	468,477	—	—	—	—	4
25,216,512	—	14,141,188	—	—	—	—	5
16,112,929	4,335,529	6,266,366	4,371,508	—	—	—	6
3,042,891	—	325,497	—	—	—	—	7
13,070,038	—	5,940,869	—	—	—	—	8
47·57	77·70	71·60	58·06	83·42	—	53·00	9
77·31	116·30	117·00	95·63	104·68	—	79·00	10



## 2.—Number of Schools, Teachers and Pupils in Canada by Provinces, 1901-1921 or latest year reported.

PRINCE EDWARD ISLAND (All publicly controlled Schools except Prince of Wales College, for year ended June 30).

Year.	Schools.	Teachers.			Pupils Enrolled.			Average Attendance of Pupils.	
		Male.	Female.	Total.	Boys.	Girls.	Total.	No.	Per cent.
1901.....	474	299	290	589	11,319	9,460	20,779	12,330	59.34
1902.....	474	293	295	588	11,271	9,532	20,803	12,884	61.93
1903.....	480	274	298	572	10,845	9,111	19,956	12,112	60.69
1904.....	480	268	294	562	10,259	8,772	19,031	11,722	61.59
1905.....	475	246	324	570	10,427	8,845	19,272	11,627	60.33
1906.....	478	246	327	573	10,196	8,790	18,986	11,903	62.69
1907.....	479	227	345	572	10,213	8,823	19,036	11,543	60.63
1908.....	476	205	375	580	9,449	8,563	18,012	11,647	64.66
1909.....	479	200	395	595	9,578	8,495	18,073	11,543	63.86
1910.....	478	188	403	591	9,573	8,359	17,932	11,632	64.86
1911.....	478	178	413	591	9,152	8,245	17,397	10,511	60.40
1912.....	474	162	428	590	8,995	8,083	17,078	10,916	63.91
1913.....	475	161	422	583	9,186	8,369	17,555	11,003	62.67
1914.....	474	162	426	588	9,514	8,555	18,069	11,170	61.81
1915.....	477	152	434	586	9,714	8,688	18,402	11,694	63.54
1916.....	476	138	457	595	9,565	8,797	18,362	11,347	61.79
1917.....	473	110	491	601	9,291	8,899	18,190	11,319	62.22
1918.....	468	100	497	597	9,101	8,760	17,861	11,334	63.50
1919.....	466	102	492	594	8,882	8,705	17,587	10,908	62.00
1920.....	454	91	486	577	8,842	8,512	17,354	10,991	62.86
1921.....	461	103	488	591	8,913	8,597	17,510	11,446	65.30

NOVA SCOTIA (Elementary and secondary publicly controlled schools for the year ended July 31).

1901.....	2,387	540	1,952	2,492	49,768	48,642	98,410	53,643	54.5
1902.....	2,394	485	2,007	2,492	50,247	48,812	99,059	55,438	55.9
1903.....	2,395	441	2,053	2,494	49,789	48,979	98,768	55,213	55.9
1904.....	2,331	388	2,053	2,441	48,536	48,350	96,886	54,000	55.8
1905.....	2,429	386	2,180	2,566	50,465	49,787	100,252	56,342	56.3
1906.....	2,446	366	2,212	2,578	50,198	50,134	100,332	59,165	58.9
1907.....	2,465	354	2,272	2,626	49,849	50,158	100,007	57,173	57.1
1908.....	2,516	355	2,309	2,664	49,906	50,199	100,105	58,343	58.2
1909.....	2,577	352	2,342	2,694	50,758	50,922	101,680	61,787	60.7
1910.....	2,579	339	2,384	2,723	50,918	51,117	102,035	65,630	64.3
1911.....	2,639	331	2,468	2,799	50,985	51,925	102,910	61,250	59.5
1912.....	2,662	293	2,511	2,804	51,498	52,486	103,984	63,640	61.2
1913.....	2,692	278	2,583	2,861	52,105	53,164	105,269	65,686	62.4
1914.....	2,724	272	2,620	2,892	52,656	53,695	106,351	66,599	62.6
1915.....	2,795	256	2,689	2,945	53,649	54,119	107,768	70,361	65.3
1916.....	2,837	246	2,773	3,019	53,944	55,245	109,189	69,227	63.4
1917.....	2,856	198	2,847	3,045	53,560	55,472	109,032	70,118	64.3
1918.....	2,859	185	2,852	3,037	52,731	55,361	108,094	67,923	62.8
1919.....	2,812	163	2,849	3,012	52,491	54,491	106,982	65,906	61.6
1920.....	2,835	199	2,816	3,015	53,179	54,917	108,096	66,442	61.6
1921.....	2,898	203	2,886	3,089	54,355	55,128	109,483	73,291	66.9

NEW BRUNSWICK (Elementary and secondary publicly controlled schools for second term ended June 30).

1901.....	1,741	353	1,488	1,841	30,870	29,550	60,420	37,717	58.34
1902.....	1,736	348	1,477	1,825	30,767	29,710	60,477	38,736	59.62
1903.....	1,726	341	1,474	1,815	30,172	29,141	59,313	37,552	58.79
1904.....	1,722	313	1,503	1,816	29,892	28,867	58,759	36,920	58.50
1905.....	1,750	304	1,562	1,866	30,854	29,546	60,400	35,675	59.60
1906.....	1,762	302	1,577	1,879	30,913	29,768	60,681	37,540	61.86
1907.....	1,766	253	1,621	1,874	30,289	29,262	59,551	35,367	59.38
1908.....	1,767	259	1,602	1,861	30,600	29,795	60,395	36,972	61.22
1909.....	1,854	251	1,691	1,942	31,489	30,448	61,937	38,731	62.53
1910.....	1,860	233	1,741	1,974	31,933	31,061	62,994	39,822	63.21
1911.....	1,885	221	1,754	1,975	31,871	31,202	63,073	39,215	62.17
1912.....	1,906	201	1,811	2,012	32,062	31,502	63,564	40,612	63.89
1913.....	1,897	193	1,809	2,002	31,924	31,656	63,580	41,276	64.91
1914.....	1,922	201	1,831	2,032	32,244	32,066	64,310	40,882	63.57
1915.....	1,964	184	1,922	2,106	33,437	33,068	66,505	44,683	67.18
1916.....	1,996	196	1,965	2,161	33,089	33,459	66,548	43,914	65.98
1917.....	1,981	167	1,962	2,129	32,025	32,751	64,776	42,884	66.22
1918.....	1,986	149	1,973	2,122	31,858	32,990	64,848	44,970	69.41
1919.....	1,950	136	1,971	2,107	31,784	33,136	64,920	46,358	71.41
1920.....	1,898	141	1,913	2,054	32,015	33,035	65,050	45,860	70.49
1921.....	1,973	155	1,987	2,142	33,615	34,477	68,092	46,777	74.00

## 2.—Number of Schools, Teachers and Pupils in Canada by Provinces, 1901-1921 or latest year reported—continued.

QUEBEC (Elementary and Model Schools and Academies for year ended June 30).

Year.	Schools.	Teachers.			Pupils Enrolled.			Average Attendance of Pupils.	
		Male.	Female.	Total.	Boys.	Girls.	Total.	No.	Per cent.
1901.....	5,970	1,268	8,924	10,192	153,801	161,080	314,881	232,255	73.76
1902.....	6,032	1,236	9,083	10,319	156,304	164,984	321,288	236,924	73.74
1903.....	6,112	1,327	9,226	10,553	158,987	167,206	326,193	243,123	74.53
1904.....	6,222	1,304	9,433	10,737	160,014	169,652	329,666	246,319	75.03
1905.....	6,288	1,336	9,607	10,943	162,982	172,786	335,768	255,420	76.07
1906.....	6,364	1,422	9,779	11,201	166,967	174,841	341,808	263,111	76.97
1907.....	6,417	1,527	10,050	11,577	170,193	177,421	347,614	266,510	79.54
1908.....	6,435	1,579	10,192	11,771	171,471	181,473	352,944	271,019	76.79
1909.....	6,525	1,600	10,526	12,126	179,146	187,866	367,012	285,729	77.85
1910.....	6,617	1,704	10,677	12,381	182,431	192,116	374,547	293,035	78.25
1911.....	6,799	1,786	11,104	12,890	189,116	200,007	389,123	301,678	77.52
1912.....	6,720	1,877	11,332	13,209	193,263	206,773	400,036	314,520	78.62
1913.....	6,798	1,952	11,649	13,601	198,492	213,292	411,784	324,447	79.77
1914.....	6,961	2,052	12,292	14,344	210,937	224,958	435,895	344,547	79.44
1915.....	7,040	2,184	12,612	14,796	217,660	230,427	448,087	360,897	80.54
1916.....	7,095	2,263	12,813	15,076	225,425	239,032	464,447	373,364	80.30
1917.....	7,195	2,265	13,373	15,638	223,362	240,028	463,390	367,468	79.29
1918.....	7,255	2,394	13,800	16,194	224,248	243,260	467,508	369,057	78.94
1919.....	7,366	2,473	13,740	16,213	233,834	252,367	486,201	365,803	75.23
1920.....	7,481	2,548	14,162	16,710	239,648	256,239	495,887	372,377	75.09

ONTARIO (Elementary and Secondary publicly controlled schools for calendar years up to 1916, since which date the Secondary School year has ended on June 30).

1901.....	6,166	2,666	7,134	9,800	247,351	233,778	492,534	275,234	55.81
1902.....	6,196	2,717	7,430	10,207	244,509	234,151	490,860	275,910	56.21
1903.....	6,281	2,648	7,677	10,325	242,618	233,382	487,880	275,385	56.44
1904.....	6,315	2,684	7,886	10,470	240,674	232,016	484,351	273,815	56.53
1905.....	6,361	2,461	8,137	10,598	242,061	233,094	487,635	281,674	57.56
1906.....	6,382	2,376	8,368	10,744	243,572	234,812	492,544	285,330	57.81
1907.....	6,411	2,304	8,616	10,920	243,593	234,956	493,791	284,998	57.69
1908.....	6,479	2,379	8,789	11,168	248,032	237,101	501,641	292,052	58.22
1909.....	6,525	2,279	9,127	11,406	250,652	238,751	507,219	295,352	58.43
1910.....	6,553	2,233	9,472	11,705	250,327	241,430	510,700	299,747	58.69
1911.....	6,693	2,145	9,871	12,016	253,220	244,708	518,605	305,648	58.94
1912.....	6,738	2,144	10,127	12,271	256,532	248,857	526,951	315,255	59.82
1913.....	6,770	2,244	10,505	12,749	263,154	256,379	542,822	330,474	60.88
1914.....	6,841	2,288	10,914	13,202	271,677	264,696	561,927	346,509	61.66
1915.....	6,892	2,322	11,182	13,504	278,508	271,792	569,030	365,959	64.31
1916.....	6,923	2,007	11,730	13,737	273,676	269,214	560,340	355,364	65.44
1917.....	6,950	1,913	12,141	14,054	280,597	281,268	561,865	369,081	65.69
1918.....	6,995	1,663	12,604	14,267	281,462	283,193	564,655	328,197	58.16
1919.....	7,113	1,965	12,836	14,801	292,310	292,414	584,724	388,768	66.49
1920.....	7,042	2,164	13,177	15,331	302,887	302,036	604,923	396,141	65.49

The discrepancy between the total of pupils enrolled in Ontario from 1901 to 1916 and the number by sex for the same years is due to the inclusion of kindergarten pupils in the total. The number by sex of these kindergarten pupils is not available.

MANITOBA (Elementary and Secondary publicly controlled schools for year ended June 30).

1901.....	1,416	618	1,051	1,669	-	-	51,888	27,550	52.9
1902.....	1,488	629	1,220	1,849	-	-	54,056	28,306	52.4
1903.....	1,584	628	1,466	2,094	-	-	57,409	36,479	63.5
1904.....	1,669	682	1,536	2,218	-	-	58,574	31,326	53.4
1905.....	1,761	597	1,675	2,272	-	-	63,287	33,794	53.4
1906.....	1,847	596	1,769	2,365	-	-	64,123	34,947	54.5
1907.....	1,943	595	1,885	2,480	-	-	67,144	37,279	55.5
1908.....	2,014	598	1,928	2,526	-	-	71,031	40,691	57.3
1909.....	2,105	637	2,025	2,662	-	-	73,044	41,405	56.7
1910.....	2,227	621	2,153	2,774	-	-	76,247	43,885	57.5
1911.....	2,341	651	2,217	2,868	-	-	80,848	45,303	56.3
1912.....	2,430	500	2,464	2,964	-	-	83,679	48,163	57.6
1913.....	2,688	474	2,390	2,864	-	-	93,954	58,778	62.6
1914.....	2,727	598	2,378	2,976	-	-	100,963	68,250	67.5
1915.....	2,888	491	2,500	2,991	-	-	103,796	66,561	64.1
1916.....	3,043	530	2,494	3,024	-	-	106,588	69,209	64.9
1917.....	3,089	524	2,573	3,097	-	-	109,925	69,968	63.65
1918.....	3,256	-	-	-	-	-	114,662	72,072	62.86
1919.....	3,479	669	2,810	3,479	-	-	123,452	88,563	71.74
1920.....	3,596	796	2,912	3,708	-	-	129,015	86,137	66.76

NOTE.—The Manitoba school year from 1901 to 1911 ended December 31st. Owing to a change in the date of the school year no report was issued for 1912.

## 2.—Number of Schools, Teachers and Pupils in Canada by Provinces, 1901-1921 or latest year reported—continued.

SASKATCHEWAN (Elementary and Secondary publicly controlled schools for year ended December 31).

Year.	Schools.	Teachers.			Pupils Enrolled.			Average Attendance of Pupils.	
		Male.	Female.	Total.	Boys.	Girls.	Total.	No.	Per cent.
1906.	873	563	733	1,296	16,376	14,899	31,275	15,770	50-31
1907.	1,101	—	—	1,470	19,454	18,168	37,622	19,841	52-48
1908.	1,418	—	—	2,180	24,773	22,313	47,086	26,081	55-00
1909.	1,705	959	1,335	2,335	28,930	26,186	55,116	28,998	52-25
1910.	1,925	1,074	1,598	2,726	34,084	31,308	65,392	34,517	52-80
1911.	2,123	1,316	2,175	3,547	37,692	34,568	72,260	38,278	53-00
1912.	2,459	1,245	2,122	3,434	42,380	39,516	81,896	49,329	60-31
1913.	2,763	1,413	2,739	4,236	52,679	48,784	101,463	56,005	55-10
1914.	3,073	1,552	2,949	4,600	59,340	54,645	113,985	65,009	57-02
1915.	3,353	1,609	3,340	5,078	63,710	59,152	122,862	72,113	58-70
1916.	3,629	1,490	4,187	5,787	66,497	62,942	129,439	71,522	55-30
1917.	3,816	1,304	4,430	5,853	72,691	69,926	142,617	88,758	62-24
1918.	3,963	1,015	5,047	6,233	76,896	74,430	151,326	91,010	60-14
1919.	4,133	1,269	5,117	6,550	83,916	80,303	164,219	98,791	62-16
1920.	4,177	1,477	5,332	6,809	88,993	85,932	174,925	106,997	61-16

ALBERTA (Elementary and Secondary publicly controlled schools for year ended December 31).

1906.	570	280	644	924	14,701	14,083	28,784	14,782	51-00
1907.	694	318	892	1,210	17,707	16,631	34,338	17,310	54-00
1908.	851	435	1,033	1,468	19,516	20,137	39,653	18,923	48-00
1909.	970	570	1,245	1,815	23,701	22,347	46,048	22,225	48-24
1910.	1,195	716	1,501	2,217	25,406	26,901	55,307	29,611	53-54
1911.	1,392	867	1,784	2,651	31,753	29,907	61,660	32,556	52-08
1912.	1,670	956	2,098	3,034	36,717	34,327	71,044	39,226	55-21
1913.	1,705	980	2,314	3,294	41,449	38,460	79,909	45,888	57-41
1914.	2,027	1,375	2,603	3,978	46,789	43,141	89,910	54,582	60-71
1915.	2,138	1,418	2,800	4,218	50,140	47,146	97,286	61,112	62-81
1916.	2,170	1,355	3,252	4,607	50,375	48,826	99,201	60,271	60-75
1917.	2,321	1,267	3,866	5,133	54,446	53,281	107,727	65,374	60-68
1918.	2,766	1,090	4,565	5,655	56,011	55,098	111,109	68,489	61-64
1919.	2,796	1,082	3,820	4,902	61,206	60,361	121,567	74,776	61-51
1920.	2,826	1,161	3,853	5,014	68,045	67,705	135,750	82,417	60-71

BRITISH COLUMBIA (Elementary and Secondary publicly controlled schools for year ended June 30).

1901.	318	185	343	543	12,069	11,546	23,615	15,335	64-94
1902.	337	194	355	570	12,254	11,647	23,901	15,808	66-13
1903.	346	189	391	607	12,559	11,940	24,499	16,627	67-87
1904.	349	182	413	624	13,330	12,457	25,787	17,071	66-16
1905.	360	177	452	663	14,104	13,250	27,354	18,871	68-94
1906.	374	176	477	690	14,524	13,998	28,522	19,809	68-33
1907.	381	163	530	735	15,847	14,692	30,039	20,459	66-63
1908.	415	181	576	806	17,162	16,152	33,314	23,473	69-62
1909.	447	213	628	900	18,659	17,568	36,227	25,662	69-97
1910.	497	288	749	1,037	20,351	19,319	39,670	28,423	70-54
1911.	533	323	856	1,179	23,162	21,783	44,945	32,517	71-27
1912.	574	351	1,002	1,353	25,734	24,234	49,968	37,384	74-88
1913.	644	406	1,191	1,597	29,544	27,840	57,384	43,072	75-12
1914.	716	485	1,374	1,859	31,890	30,067	61,957	49,090	79-30
1915.	767	521	1,445	1,966	33,059	31,205	64,264	52,494	81-73
1916.	810	523	1,541	2,064	32,874	31,696	64,570	50,880	78-78
1917.	848	468	1,656	2,124	32,480	32,638	65,118	52,577	80-74
1918.	855	436	1,816	2,246	33,540	33,976	67,516	54,748	81-08
1919.	873	486	1,846	2,332	35,944	36,052	72,006	56,692	78-73
1920.	922	595	2,139	2,734	39,772	39,471	79,243	59,791	75-45
1921.	946	572	1,985	2,557	43,442	42,508	85,950	68,497	79-69

NOTE.—The totals for teachers in British Columbia from 1901 to 1909 are greater than the sum of the male and the female teachers because no information as to the sex of high school teachers is available. This discrepancy also appears in the Summary for Canada.



## 2.—Number of Schools, Teachers and Pupils in Canada, by Provinces, 1901-1921 or latest year reported—concluded.

SUMMARY FOR CANADA (1901-1920).

Year.	Schools.	Teachers.			Pupils enrolled.			Average Attendance of Pupils.	
		Male.	Female.	Total.	Boys.	Girls.	Total.	No.	Per cent.
1901.....	18,472	5,929	21,182	27,126	505,178	494,056	1,062,527	654,064	61.56
1902.....	18,657	5,962	21,567	27,860	505,352	493,836	1,070,444	664,006	62.03
1903.....	18,924	5,848	22,585	28,660	504,970	499,759	1,074,008	676,491	63.92
1904.....	19,088	5,721	23,118	28,908	502,705	500,114	1,073,054	671,173	62.55
1905.....	19,424	5,507	23,937	29,483	510,893	507,308	1,093,968	693,403	63.88
1906.....	21,096	6,327	25,886	32,263	547,447	541,325	1,167,055	742,357	63.61
1907.....	21,657	5,741	26,211	33,457	556,545	549,111	1,189,142	750,480	63.11
1908.....	22,371	5,991	26,804	35,027	570,858	565,693	1,224,090	779,201	63.66
1909.....	23,187	7,061	29,314	36,480	592,913	588,583	1,266,356	811,432	64.08
1910.....	23,331	7,396	30,678	38,104	608,023	601,611	1,304,824	846,302	64.81
1911.....	24,883	7,818	33,642	40,502	626,951	622,345	1,350,821	866,956	64.18
1912.....	23,133	7,229	31,431	38,712	647,181	645,778	1,314,581	870,882	66.25
1913.....	26,174	8,187	35,676	43,872	678,536	677,944	1,463,445	966,014	66.01
1914.....	27,426	8,861	37,399	46,318	715,027	711,823	1,546,358	1,037,166	67.07
1915.....	28,174	9,244	38,802	48,156	739,877	735,617	1,595,167	1,107,563	69.43
1916.....	28,824	8,709	41,218	50,307	745,445	749,211	1,615,892	1,102,450	68.23
1917.....	29,453	8,292	43,260	51,601	758,452	774,263	1,639,303	1,135,788	69.28
1918.....	30,236	7,556	45,721	53,438	765,847	787,068	1,662,842	1,105,696	66.49
1919.....	30,815	7,676	42,671	50,511	800,867	817,829	1,732,861	1,180,074	68.10
1920.....	31,814	9,045	46,688	55,733	833,381	847,847	1,804,680	1,229,579	67.58

NOTE.—From 1901 to 1905, inclusive, the Summary for Canada comprised the seven provinces of Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and British Columbia. The two provinces of Saskatchewan and Alberta were formed in 1905, and from 1906 all the nine provinces are included, with the exception of Manitoba for 1912, when no Education Report was issued by that province. The sex of the teachers in the Secondary schools of Saskatchewan is not given, and in Manitoba the sex of the pupils was not given for any of the years, while Ontario did not give the sex of its kindergarten pupils until 1917. In the Summary, therefore, these defects are indicated by printing certain items in italics. A general summary for 1921 for all elementary and secondary schools under public control is given in Table 1, pages 136-139.

## 3.—Teachers in Training in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901-1921, Saskatchewan and Alberta, 1906-1920.

NOVA SCOTIA.

Number of Teachers in Training in the Provincial Normal College.

Year.	Enrol-ment.	Year.	Enrol-ment.	Year.	Enrol-ment.	Year.	Enrol-ment.
1901.....	240	1906.....	154	1911.....	268	1916.....	388
1902.....	182	1907.....	142	1912.....	293	1917.....	263
1903.....	145	1908.....	161	1913.....	302	1918.....	260
1904.....	191	1909.....	215	1914.....	318	1919.....	255
1905.....	148	1910.....	260	1915.....	355	1920.....	228
						1921.....	241

NEW BRUNSWICK.

Number of Instructors and Teachers in training in the Normal School.

Year.	Instruct-ors.	TEACHERS IN TRAINING IN NORMAL SCHOOL.			Year.	Instruct-ors.	TEACHERS IN TRAINING IN NORMAL SCHOOL.		
		Male.	Female.	Total.			Male.	Female.	Total.
1901.....	11	41	155	196	1911.....	16	46	324	370
1902.....	14	68	201	269	1912.....	16	46	330	376
1903.....	16	35	189	224	1913.....	18	53	305	358
1904.....	19	35	253	288	1914.....	16	45	312	357
1905.....	—	54	231	285	1915.....	16	52	299	351
1906.....	16	44	263	307	1916.....	19	45	327	372
1907.....	18	45	315	360	1917.....	18	41	331	372
1908.....	18	35	299	334	1918.....	20	29	258	287
1909.....	18	53	290	343	1919.....	19	13	250	275
1910.....	15	63	295	358	1920.....	—	25	242	267
					1921.....	—	15	201	216



### 3.—Teachers in Training in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901-1921, Saskatchewan and Alberta, 1906-1920—continued.

QUEBEC.

Number of Teachers and Pupils in Normal Schools.

Year.	Schools.	INSTRUCTORS.			TEACHERS IN TRAINING.			Average attendance.	Per cent.
		Male.	Female.	Total.	Male.	Female.	Total.		
1901	5	31	27	58	97	256	353	345	97.73
1902	5	31	30	61	130	290	420	415	98.81
1903	5	31	30	61	138	322	460	455	98.91
1904	5	30	31	61	151	241	392	388	98.98
1905	5	32	30	62	142	274	416	410	98.56
1906	5	35	27	62	143	280	423	420	99.29
1907	6	34	38	72	159	308	467	462	98.93
1908	7	39	27	66	165	361	526	524	99.62
1909	10	58	59	117	182	533	715	710	99.30
1910	11	53	75	128	177	610	787	780	99.11
1911	11	50	79	129	174	666	840	835	99.40
1912	11	43	77	120	160	676	836	—	—
1913	13	50	86	136	175	913	1,088	—	—
1914	14	48	98	146	189	1,081	1,270	—	—
1915	14	54	131	185	191	1,121	1,312	—	—
1916	14	52	144	196	191	1,166	1,357	1,357	100.00
1917	14	52	144	196	180	1,181	1,361	1,361	100.00
1918	14	52	153	205	180	1,159	1,339	1,339	100.00
1919	14	57	148	205	159	1,064	1,223	1,135	92.80
1920	14	50	157	207	182	1,320	1,502	1,395	92.87
1921	—	—	—	—	166	1,210	1,376	—	—

NOTE.—In Prince Edward Island, teachers are trained in Prince of Wales College; the number of the students of this college training for teachers' diplomas in 1919-20 was 68 men and 152 women, or a total of 220. In British Columbia, teachers are trained at the Normal Schools in Vancouver and Victoria. In 1921-22 there were enrolled in these schools 543 students.

ONTARIO.

Teachers trained from 1901 to 1921 inclusive.

Year.	Model Schools.			Provincial Normal Schools.			Normal Colleges, etc.			Total.		Grand Total.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	
1901	—	—	—	—	—	—	—	—	—	—	—	613
1902	333	838	1,171	123	496	619	57	75	132	513	1,409	1,922
1903	305	843	1,148	54	532	586	37	90	127	396	1,465	1,861
1904	295	827	1,122	22	282	304	45	121	166	362	1,230	1,592
1905	308	901	1,209	18	288	306	45	125	170	371	1,314	1,685
1906	389	1,361	1,750	21	324	345	52	139	191	462	1,824	2,286
1907-8	365	995	1,360	23	405	428	—	—	—	388	1,400	1,788
1908-9	37	224	261	128	1,021	1,149	—	—	—	165	1,245	1,410
1909-10	48	227	275	121	1,114	1,235	—	—	—	169	1,341	1,510
1910-11	31	177	208	121	1,145	1,266	—	—	—	152	1,322	1,474
1911-12	81	368	449	114	950	1,064	—	—	—	195	1,318	1,513
1912-13	94	356	450	114	872	986	—	—	—	208	1,228	1,436
1913-14	77	285	362	124	1,077	1,201	—	—	—	201	1,362	1,563
1914-15	61	204	265	126	1,034	1,160	—	—	—	187	1,238	1,425
1915-16	43	167	210	211	1,398	1,609	—	—	—	254	1,565	1,819
1916-17	14	131	145	137	1,156	1,293	—	—	—	151	1,287	1,438
1917-18	5	157	162	59	1,455	1,514	—	—	—	64	1,612	1,676
1918-19	—	86	86	44	1,056	1,100	169	304	473	213	1,446	1,659
1919-20	4	77	81	203	1,045	1,248	297	262	559	504	1,384	1,888
1920-21	41	460	501	199	1,282	1,481	150	76	226	390	1,818	2,208 <sup>2</sup>

<sup>1</sup>Previous to 1908 there were 55 County Model Schools in Ontario in addition to three Normal Schools and the Normal College. The function of these Model Schools was the training of third class teachers, while that of the Normal Schools was generally the training of second class and kindergarten teachers, and that of the College, the training of first class and secondary teachers. In 1908, most of the County Model Schools were abolished and the duty of training teachers for all the Public and Separate Schools except those in the districts and poorer sections of the province was placed upon the Normal Schools, which were increased in number from 3 to 7.

The Department of Education ceased to report the attendance at the Normal College after 1906. This college has been since known by various names. Recently, and up till 1920, its work was done by the Faculty of Education of the Universities of Toronto and Queen's and the figures for the Normal College given in the above table for 1918-19 and 1919-20 represent the enrolment in the Faculty of Education of these Universities. In 1920 their functions were transferred to the Ontario College of Education.

<sup>2</sup>Autumn Model Schools.

<sup>3</sup>In addition to these there were 13 extra mural students at Model Schools in 1921.

### 3.—Teachers in Training in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901-1921, Saskatchewan and Alberta, 1906-1920—concluded.

#### MANITOBA.

Number of Teachers and Students in Normal Schools.

Year.	INSTRUCTORS.		STUDENTS AT		Year.	INSTRUCTORS.		STUDENTS AT	
	Pro-vincial Normal.	Local Normal.	2nd class sessions.	3rd class sessions.		Pro-vincial Normal.	Local Normal.	2nd class sessions.	3rd class sessions.
1901.....	7	13	90	161	1911.....	6	11	126	502
1902.....	7	14	86	234	1912.....	School year	11	changed.	139
1903.....	7	14	82	237	1913.....				
1904.....	7	14	129	261	1914.....	6	10	180	390
1905.....	8	18	171	320	1915.....	6	14	206	401
1906.....	6	14	148	328	1916.....	14	12	331	466
1907.....	5	11	128	272	1917.....	13	11	309	406
1908.....	5	10	131	279	1918.....	10	7	288	290
1909.....	5	10	136	312	1919.....	10	5	251	225
1910.....	5	10	122	381	1920.....	10	4	285	303
					1921.....	10	4	321	308
									321

#### SASKATCHEWAN.

Teachers trained from 1906 to 1920 inclusive.

Year.	First Class.		Second Class.		Third Class.		Total.		Grand Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1906.....	17	15	46	98	2	10	65	123	188
1907.....	6	14	33	72	—	7	39	93	132
1908.....	13	13	35	45	20	103	68	161	229
1909.....	5	3	12	41	115	235	132	279	411
1910.....	4	11	32	78	94	228	130	317	447
1911.....	—	—	28	104	18	91	46	195	241
1912.....	14	51	29	90	92	304	135	445	580
1913.....	32	57	20	118	83	333	135	508	643
1914.....	46	72	22	97	196	453	264	622	886
1915.....	68	93	43	180	248	590	359	863	1,222
1916.....	40	76	48	242	149	356	237	674	911
1917.....	26	66	38	287	89	575	153	928	1,081
1918.....	15	91	35	382	14	83	64	556	620
1919.....	36	95	57	420	71	379	164	894	1,058
1920.....	15	37	31	164	91	385	137	586	723
Totals.....	337	694	509	2,418	1,282	4,132	2,128	7,244	9,372

#### ALBERTA.

Teachers trained at Calgary and Camrose Normal Schools from 1906 to 1920 inclusive.

Year.	First Class.			Second Class.			Total.		Grand Total.	Special Classes <sup>1</sup> .
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.		
1906.....	—	—	25	—	—	77	27	75	102	—
1907.....	—	—	29	—	—	68	23	74	97	—
1908.....	—	—	—	—	—	—	44	96	140	—
1909.....	19	36	55	33	94	127	52	130	182	—
1910.....	24	31	55	47	116	163	71	147	218	—
1911.....	34	47	81	42	125	167	76	172	248	—
1912.....	32	50	82	46	150	196	78	200	278	—
1913.....	33	78	111	29	152	181	62	230	292	—
1914.....	45	69	114	43	200	243	88	269	357	7
1915.....	95	83	178	113	287	400	208	370	678	23
1916.....	58	88	146	66	203	269	124	291	415	23
1917.....	31	54	85	32	217	249	63	271	334	24
1918.....	30	121	151	30	286	316	60	407	467	21
1919.....	44	132	176	74	348	422	118	480	598	345
1920.....	39	176	215	75	405	479	114	580	694	—
Totals <sup>2</sup> .....	484	965	1,503	630	2,583	3,357	1,208	3,792	5,000	—

<sup>1</sup>These classes are designed principally for the purpose of giving teachers from the United Kingdom and United States a short period of training in the special requirements of the Alberta Department of Education. In 1918 a class was added for the purpose of enabling second class teachers to train for a higher professional certificate. The large enrolment in 1919 contained a number of students who desire special qualifications for teaching foreigners.

<sup>2</sup>The italics indicate partial totals. A third Normal School was opened in Edmonton in the latter half of 1921 with an enrolment of 116 students.

#### 4.—Number of Teachers and Pupils in Roman Catholic Classical Colleges in Quebec, 1901-1921.

Year.	Number of			Average Attendance.	Year.	Number of			Average Attendance.
	Colleges.	Professors.	Pupils enrolled.			Colleges.	Professors.	Students enrolled.	
1901.....	19	549	5,915	5,468	1911.....	19	642	7,140	6,521
1902.....	19	562	6,096	5,698	1912.....	21	662	7,818	7,280
1903.....	19	559	6,174	5,694	1913.....	21	687	8,189	7,677
1904.....	19	590	6,265	5,758	1914.....	21	726	8,444	7,841
1905.....	19	621	6,269	5,772	1915.....	21	754	8,251	7,664
1906.....	19	621	6,318	5,895	1916.....	21	704	7,696	6,602
1907.....	19	624	6,268	5,796	1917.....	21	747	8,128	6,790
1908.....	19	624	6,274	5,709	1918.....	21	747	7,622	6,956
1909.....	18	609	6,397	5,872	1919.....	21	744	7,711	6,338
1910.....	19	642	6,599	6,053	1920.....	21	742	8,632	7,940
					1921.....	21	748	9,033	8,159

NOTE.—The Roman Catholic Classical Colleges are not included in Table 2 with the other public institutions for the reason that they are special institutions doing university, secondary and even elementary work. The following statistics of secondary schools in Ontario, Saskatchewan and British Columbia have been included in Table 2 and are repeated here mainly to show the differentiation between the sexes in the higher grades.

#### 5.—Number of Teachers and Pupils in Collegiate Institutes and High Schools in Ontario, 1901-1921.

Year.	Schools.	Teachers.	Pupils Enrolled.			Average attendance.	Per cent.
			Boys.	Girls.	Total.		
1901.....	131	579	10,869	11,654	22,523	13,224	58.71
1902.....	134	593	11,629	12,843	24,472	14,430	58.97
1903.....	135	619	11,988	13,734	25,722	15,317	59.55
1904.....	138	661	12,718	14,991	27,709	16,730	60.38
1905.....	140	689	13,035	15,626	28,661	17,567	61.29
1906.....	142	719	13,336	16,056	29,392	18,078	61.50
1907.....	143	750	13,799	16,532	30,331	18,485	60.94
1908.....	145	795	14,731	17,181	31,912	19,862	62.23
1909.....	145	820	15,776	17,325	33,101	20,791	62.81
1910.....	145	853	15,196	17,416	32,612	20,389	62.52
1911.....	148	898	14,679	17,548	32,227	20,177	62.60
1912.....	148	917	14,846	17,427	32,273	20,268	62.89
1913.....	161	970	15,489	18,257	33,746	21,448	63.55
1914.....	160	1,023	17,001	19,465	36,466	23,360	64.06
1915.....	160	1,020	17,705	20,721	38,426	24,825	64.60
1916-17.....	161	1,038	12,339	16,494	28,833	22,781	79.01
1917-18.....	162	1,051	12,353	16,744	29,097	22,740	78.15
1918-19.....	164	1,088	13,228	17,504	30,732	24,500	79.72
1919-20.....	167	1,168	14,681	18,355	33,036	26,816	81.17
1920-21.....	168	1,207	15,221	18,907	34,128	28,952	84.83

#### 6.—Number of Teachers and Pupils in Continuation Schools in Ontario, 1911-1921.

Year.	Schools.	Teachers.	Pupils Enrolled.			Average attendance.	Per cent.
			Boys.	Girls.	Total.		
1911.....	129	218	2,394	3,359	5,753	3,487	60.61
1912.....	138	226	2,499	3,595	6,094	3,777	61.97
1913.....	125	218	2,229	3,315	5,544	3,386	61.07
1914.....	131	237	2,474	3,595	6,069	3,812	62.81
1915.....	132	238	2,803	3,997	6,800	4,274	62.85
1916-17.....	132	234	1,979	3,103	5,082	3,729	73.37
1917-18.....	137	241	1,989	3,115	5,104	3,734	73.15
1918-19.....	136	234	1,867	3,139	5,006	3,773	75.36
1919-20.....	137	244	2,001	3,125	5,126	3,955	77.15
1920-21.....	144	255	2,304	3,519	5,823	4,790	82.26

NOTE.—Previous to 1911 the statistics of these schools are included with those of Elementary Schools.

### 7.—Number of Teachers and Pupils in Collegiate Institutes and High Schools in Saskatchewan, 1908-1920.

Year.	Schools.	Teachers.	Pupils.					Total.
			Boys.	Girls.	1st and 2nd years.	3rd year.	4th year.	
1908.....	8	23	335	399	487	183	64	734
1909.....	13	41	504	643	694	338	115	1,147
1910.....	13	54	623	805	884	355	189	1,428
1911.....	13	56	766	927	1,003	486	204	1,693
1912.....	15	67	885	1,129	1,237	550	227	2,014
1913.....	16	84	1,028	1,326	1,446	658	250	2,354
1914.....	18	99	1,304	1,622	1,814	763	349	2,926
1915.....	21	129	1,545	2,038	2,429	863	291	3,583
1916.....	21	138	1,566	2,283	2,398	1,090	361	3,849
1917.....	22	119	1,445	2,441	2,507	974	405	3,886
1918.....	22	161	1,533	2,561	2,533	1,065	496	4,094
1919.....	24	164	1,910	2,841	3,005	1,207	539	4,751
1920.....	24	198	2,492	3,425	3,946	1,400	571	5,917

### 8.—Number of Teachers and Pupils in High Schools in British Columbia, 1901-1921.

Year.	Schools.	Teachers.	Pupils Enrolled.			Average attendance.	Per cent.
			Boys.	Girls.	Total.		
1901.....	5	15	215	369	584	373	63.87
1902.....	7	21	313	471	784	454	71.94
1903.....	8	27	316	540	856	627	73.25
1904.....	10	29	381	600	981	685	69.83
1905.....	12	34	433	657	1,090	834	76.51
1906.....	13	37	473	763	1,236	923	74.68
1907.....	15	42	432	823	1,355	976	72.03
1908.....	16	49	613	857	1,470	1,124	76.46
1909.....	18	59	812	997	1,809	1,441	79.66
1910.....	21	66	919	1,122	2,041	1,549	75.89
1911.....	23	71	940	1,048	1,988	1,533	77.11
1912.....	24	77	973	1,178	2,151	1,645	76.48
1913.....	30	96	1,232	1,448	2,680	2,109	78.69
1914.....	34	110	1,414	1,593	3,007	2,535	84.30
1915.....	37	132	1,844	2,068	3,912	3,332	85.17
1916.....	40	162	2,260	2,510	4,770	3,816	80.00
1917.....	41	169	2,074	2,767	4,841	3,999	82.61
1918.....	43	184	2,151	2,999	5,150	4,201	81.57
1919.....	45	197	2,392	3,414	5,806	4,670	80.44
1920.....	48	234	2,826	3,810	6,636	5,359	80.79
1921.....	52	251	3,093	4,166	7,259	6,132	84.48

### 9.—Vocational Schools, Teachers and Pupils in Canada, Year ended June 30, 1921.

Province.	Number of Schools.			Number of Teachers.				Pupils Enrolled.			
	Day.	Evening.	Total.	Day.	Evening.	Correspondence Dept.	Total.	Day.	Evening.	Correspondence Dept.	Total.
Prince Edward Isl'd	1	1	2	7	7	—	14	35	110	—	145
Nova Scotia.....	1	36	37	—	151	—	151	—	2,754	—	2,754
New Brunswick.....	1	13	14	7	63	1	70	56	1,434	265	1,755
Quebec.....	21	20	41	133	153	—	286	1,078	3,933	—	5,011
Ontario.....	15	73	88	177	845	—	1,022	4,790	26,527	—	31,317
Manitoba.....	9	4	13	47	98	—	145	2,173	3,592	—	5,765
Saskatchewan.....	4	4	8	55	52	—	107	250	825	—	1,075
Alberta.....	7	21	28	72	101	2	175	1,860	2,069	220	4,149
British Columbia.....	10	21	31	75	135	1	211	1,441	3,197	135	4,773
Totals.....	69	193	262	573	1,605	4	2,181	11,683	44,441	620	56,744

NOTE.—Schools conducting both day and evening classes are included under both headings. Teachers engaged in both day and evening work are also shown twice. Enrolments are the maximum number reported during the year. In Ontario the commercial classes in each locality are shown separately.



# 10.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901-1921.

## PRINCE EDWARD ISLAND.

(RECEIPTS).

Year.	Government Grant.	Local Assessment.	Total.	Year.	Government Grant.	Local Assessment.	Total.
	\$	\$	\$		\$	\$	\$
1901.....	128,288	36,647	164,935	1913.....	150,732	56,874	207,606
1902.....	127,495	38,827	166,322	1914.....	156,503	61,490	217,993
1903.....	123,919	42,698	166,617	1915.....	168,413	91,258	259,671
1904.....	121,696	47,069	168,765	1916.....	173,962	70,610	244,572
1905.....	122,897	45,695	168,592	1917.....	178,607	72,623	251,230
1906 <sup>1</sup> .....	91,946	34,763	126,709	1918.....	173,579	94,968	268,547
1907.....	123,898	46,429	170,327	1919.....	187,488	98,472	285,960
1908.....	127,092	49,874	176,966	1920.....	211,618	131,030	342,648
1909.....	129,179	54,027	183,206	1921.....	244,347	152,431	396,778
1910.....	127,548	53,924	181,472				
1911.....	126,438	54,738	181,176				
1912 <sup>2</sup> .....	179,956	81,685	261,641				

<sup>1</sup> Nine months.    <sup>2</sup>Eighteen months.

## NOVA SCOTIA.

(RECEIPTS).

Year.	Government Grant.	Municipal Funds.	Local Assessment.	Total.
	\$	\$	\$	\$
1901.....	254,778	119,876	470,108	844,762
1902.....	257,616	117,376	538,851	913,843
1903.....	263,092	121,016	552,350	936,458
1904.....	268,904	146,382	569,745	985,031
1905.....	271,657	145,627	576,560	993,844
1906.....	270,925	147,089	655,705	1,073,720
1907.....	277,415	146,959	616,431	1,040,805
1908.....	335,584	147,130	666,590	1,149,304
1909.....	341,058	147,400	711,428	1,199,886
1910.....	357,282	146,936	761,014	1,265,233
1911.....	378,726	146,823	804,125	1,329,674
1912.....	374,810	147,170	859,284	1,381,264
1913.....	385,734	156,864	944,992	1,487,590
1914.....	308,671	164,980	1,002,967	1,556,618
1915.....	407,213	168,009	1,066,892	1,642,114
1916.....	414,738	168,114	1,037,302	1,620,154
1917.....	432,284	163,535	1,157,907	1,753,726
1918.....	427,484	163,994	1,280,965	1,872,444
1919.....	432,496	204,519	1,460,578	2,097,593
1920.....	485,787	224,025	1,978,242	2,634,763
1921.....	576,591	495,242	2,370,712	3,442,546

## NEW BRUNSWICK (RECEIPTS).

	\$	\$	\$	\$
1901.....	163,225	90,492	346,623	600,340
1902.....	162,227	92,095	341,475	595,797
1903.....	160,825	94,969	374,196	629,990
1904.....	156,982	94,835	380,000	631,817
1905.....	159,741	91,947	387,200	638,888
1906.....	160,957	91,718	No record.	
1907.....	160,553	91,429	No record.	
1908.....	182,453	91,620	494,947	769,020
1909.....	190,854	91,235	539,002	821,091
1910.....	195,363	90,454	580,069	865,886
1911.....	196,082	90,193	593,073	879,348
1912.....	196,958	93,783	632,384	923,125

10.—Receipts and Expenditure for Public Education in Canada, by Provinces,  
1901-1921—continued.

NEW BRUNSWICK (RECEIPTS)—concluded.

Year.	Government Funds.	Municipal Funds.	Local Assessment.	Total.
	\$	\$	\$	\$
1913.....	196,320	97,404	648,479	942,203
1914.....	195,261	96,946	704,476	996,683
1915.....	200,635	97,423	761,753	1,059,811
1916.....	206,486	96,141	844,256	1,146,883
1917.....	204,754	97,284	843,357	1,145,395
1918.....	286,949	97,230	930,567	1,314,746
1919.....	277,996	99,097	1,153,163	1,530,256
1920.....	290,028	103,629	1,364,915	1,758,572
1921.....	352,693	146,003	1,779,926	2,278,622

QUEBEC (EXPENDITURE).

Year.	Government Grant.	Local Assess- ment and other sources.	Total.	Year.	Government Grant.	Local Assess- ment and other sources.	Total.
	\$	\$	\$		\$	\$	\$
1901.....	453,950	2,999,804	3,453,754	1911.....	1,065,429	5,729,104	6,794,533
1902.....	473,450	3,051,109	3,524,559	1912.....	1,204,529	6,212,440	7,416,969
1903.....	484,960	3,234,074	3,718,038	1913.....	1,529,006	7,696,765	9,225,771
1904.....	469,280	3,347,115	3,816,395	1914.....	1,724,110	7,172,879	8,896,989
1905.....	480,760	3,603,758	4,084,518	1915.....	1,782,417	9,681,206	11,463,623
1906.....	536,150	3,802,402	4,338,552	1916.....	1,882,838	10,533,769	12,416,607
1907.....	540,650	4,050,741	4,591,391	1917.....	2,068,766	11,887,454	13,956,220
1908.....	683,410	4,565,537	5,148,947	1918.....	2,077,569	12,405,301	14,482,870
1909.....	837,450	4,680,416	5,517,866	1919.....	2,145,976	14,698,708	16,844,684
1910.....	908,391	5,302,139	6,210,530	1920.....	2,334,108	16,867,297	19,201,405

ONTARIO (RECEIPTS).

Year.	ELEMENTARY SCHOOLS.				Total for Secondary Schools. <sup>1</sup>	Grand Total.
	Government Grants.	Local Assess- ments.	Clergy Re- serve Fund and other sources.	Total.		
	\$	\$	\$	\$	\$	\$
1901.....	377,308	3,784,070	1,468,678	5,630,056	784,626	6,414,682
1902.....	383,666	3,959,912	1,422,924	5,766,502	832,853	6,599,355
1903.....	390,156	4,263,893	1,406,957	6,061,006	876,737	6,937,743
1904.....	405,362	4,464,227	1,600,982	6,470,571	965,867	7,431,438
1905.....	414,004	4,928,790	1,886,490	7,229,194	1,096,266	8,325,460
1906.....	509,795	5,529,496	1,883,394	7,922,685	1,209,782	9,132,467
1907.....	655,239	6,146,825	2,455,864	9,257,928	1,611,553	10,869,481
1908.....	770,426	6,581,232	2,620,523	9,972,181	2,001,307	11,973,488
1909.....	810,595	6,574,372	3,013,501	10,398,468	2,173,533	12,572,001
1910.....	805,635	7,334,458	3,573,507	11,713,600	2,195,322	13,908,922
1911.....	892,377	7,826,083	3,778,183	12,496,643	2,180,026	14,676,669
1912.....	842,278	9,478,887	3,936,887	14,258,052	2,709,389	16,967,441
1913.....	778,150	9,856,380	4,025,284	14,659,814	3,686,267	18,346,081
1914.....	760,845	12,608,865	4,069,565	17,439,275	4,857,437	22,296,712
1915.....	849,872	11,810,023	4,089,210	16,749,105	3,352,731	20,101,836
1916.....	831,988	11,010,356	4,327,738	16,080,082	3,380,927	19,461,009
1917.....	907,846	12,193,439	4,168,000	17,269,285	3,412,115	20,681,400
1918.....	970,585	13,114,725	4,278,957	18,364,267	3,241,478	21,605,745
1919.....	1,316,529	14,364,049	6,912,656	22,593,234	3,605,113	26,198,347
1920.....	1,612,837	18,766,800	9,413,521	29,793,158	3,086,440	32,879,598

<sup>1</sup>It is uncertain whether or not these figures include the Industrial, Technical and Arts Schools. The total receipts for these schools in 1920 were \$1,489,496, an increase of \$657,361 over the year before.

# 10.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901-1921—continued.

## ONTARIO (EXPENDITURE).

Year.	Elementary Schools.					Total for Secondary and Technical schools.	Grand Total.
	Teachers' Salaries.	Sites and building school-houses.	Maps, apparatus, prizes, etc.	Rent, repairs, fuel, and other expenses.	Total for Elementary schools.		
	\$	\$	\$	\$	\$	\$	\$
1901.....	3,055,321	531,072	81,085	1,052,232	4,720,310	728,132	5,448,442
1902.....	3,198,132	432,753	86,723	1,107,552	4,825,160	769,680	5,594,840
1903.....	3,309,993	428,817	74,486	1,204,573	5,077,869	816,082	5,893,951
1904.....	3,473,710	578,656	87,997	1,139,130	5,459,493	877,087	6,336,580
1905.....	3,669,230	959,137	98,209	1,434,670	6,161,236	1,004,498	7,165,734
1906.....	3,880,548	854,452	108,547	1,559,659	6,403,206	1,029,294	7,432,500
1907.....	4,389,524	1,220,820	213,096	1,732,739	7,556,179	1,213,697	8,769,876
1908.....	4,613,571	1,419,754	139,330	1,741,171	7,943,826	1,385,832	9,329,658
1909.....	5,008,512	1,264,989	136,627	1,731,265	8,141,423	1,621,637	9,763,060
1910.....	5,310,039	2,140,200	131,171	1,761,792	9,343,202	1,636,166	10,979,368
1911.....	5,610,213	2,164,459	139,229	1,990,383	9,904,284	2,200,138	12,104,422
1912.....	6,109,547	2,777,960	167,755	2,218,698	11,273,960	2,218,148	13,492,108
1913.....	6,648,255	2,869,830	149,167	2,658,655	12,325,907	2,942,384	15,268,291
1914.....	7,203,034	4,626,030	167,283	2,854,621	14,550,968	3,739,065	18,590,533
1915.....	7,614,110	3,561,951	177,038	2,914,377	14,267,476	2,781,768	17,049,244
1916.....	7,929,490	2,232,110	192,212	2,998,093	13,351,905	2,794,402	16,146,307
1917.....	8,338,450	1,987,644	290,207	3,435,534	14,111,835	2,743,596	16,855,431
1918.....	9,027,151	1,242,642	169,136	4,737,794	15,176,723	3,412,167	18,588,890
1919.....	10,160,399	2,870,349	302,046	5,158,833	18,851,627	3,795,816	22,647,443
1920.....	13,070,038	4,792,571	333,288	7,020,615	25,216,512	5,409,923	30,626,435

## MANITOBA.

Year.	Receipts.					Balance from previous years.	Total.
	Legislative grant.	Municipal taxes.	Deben- tures.	Prom- issory notes.	Sundries.		
	\$	\$	\$	\$	\$	\$	\$
1907.....	242,383	1,223,336	315,271	802,574	141,452	115,677	2,840,693
1908.....	267,645	1,475,473	285,091	777,417	424,666	111,741	3,342,033
1909.....	282,200	1,539,047	356,962	905,747	274,803	119,970	3,478,729
1910.....	296,115	1,682,238	425,320	1,336,370	281,988	162,736	4,184,767
1911.....	325,410	1,847,380	1,318,068	1,275,239	76,172	399,539	5,241,808
1913.....	351,745	2,198,459	987,457	960,215	213,283	302,407	5,013,566
1914.....	390,582	2,673,449	1,545,042	396,459	150,429	518,388	5,674,349
1915.....	468,335	3,047,670	1,738,926	2,071,397	122,974	466,837	7,916,139
1916.....	503,774	3,296,667	344,673	2,080,204	239,176	609,982	7,074,476
1917.....	522,293	3,445,239	321,370	947,486	108,046	376,318	5,720,752
1918.....	616,977	3,736,452	240,855	1,142,289	133,111	416,194	6,285,878
1919.....	589,174	4,200,519	188,931	1,163,751	264,710	508,348	6,917,406
1920.....	691,981	4,947,186	402,181	2,208,019	432,110	436,168	9,117,644
1921.....	822,186	6,922,864	2,250,073	2,773,212	280,644	457,312	13,506,292

Year.	Expenditure.				
	Teachers' Salaries.	Building, etc.	Fuel.	Repairs and caretaking.	Salary of Sec.-Treas.
	\$	\$	\$	\$	\$
1907.....	1,069,224	460,260	79,963	126,216	23,420
1908.....	1,103,990	582,034	89,756	126,952	25,656
1909.....	1,203,232	641,900	80,921	132,421	26,174
1910.....	1,237,010	830,432	87,002	148,932	28,689
1911.....	1,452,630	1,199,288	109,299	167,734	29,218
1913.....	1,734,854	1,420,882	99,918	132,222	32,493
1914.....	1,861,809	1,426,758	146,664	242,270	37,684
1915.....	2,066,440	1,358,533	110,049	379,318	65,025
1916.....	2,195,226	823,266	165,697	358,315	41,530
1917.....	2,314,006	382,988	171,462	385,226	19,806
1918.....	2,382,840	440,221	197,258	418,660	46,249
1919.....	2,648,230	556,072	243,155	372,323	51,553
1920.....	3,296,035	958,933	354,076	479,192	96,086
1921.....	4,335,529	2,081,176	393,160	741,058	91,412

10.—Receipts and Expenditure for Public Education in Canada, by Provinces,  
1901-1921—continued.

MANITOBA (EXPENDITURE)—concluded.

Year.	Principal of Debentures.	Interest on Debentures.	Promissory notes.	Other expenditure.	Total.
	\$	\$	\$	\$	\$
1907.....	81,795	80,392	667,791	200,856	2,729,917
1908.....	190,893	99,246	869,334	141,905	3,229,766
1909.....	111,295	244,596	757,200	137,770	3,335,500
1910.....	269,660	127,589	1,013,076	169,281	4,000,671
1911.....	131,975	144,735	1,590,565	199,446	5,024,890
1913.....	294,030	96,979	838,162	387,255	5,036,795
1914.....	230,523	250,392	1,412,515	471,105	6,079,720
1915.....	184,910	344,476	2,260,906	347,241	7,118,898
1916.....	194,257	409,193	2,132,286	338,459	6,658,229
1917.....	241,223	155,619	1,196,806	466,166	5,333,302
1918.....	360,134	357,409	1,055,581	651,031	5,909,383
1919.....	391,332	400,754	1,305,433	649,888	6,618,740
1920.....	347,356	439,946	1,802,294	1,053,174	8,827,092
1921.....	420,323	496,565	3,049,437	1,470,545	13,079,205

NOTE.—For a summary of the principal items of Receipts and Expenditure from 1901 to 1906, see Year Book of 1915, page 128. From 1907 the items are given in greater detail, as above. Owing to change of year, no figures were published for 1912.

SASKATCHEWAN (RECEIPTS).

Year.	Elementary Schools.					Secondary Schools.		Grand Total.
	Government Grants.	Local Assessments.	Proceeds of Debentures.	Other Sources.	Total <sup>1</sup> .	Government Grant.	Total <sup>1</sup> .	
	\$	\$	\$	\$	\$	\$	\$	\$
1906.....	174,218	602,624	360,206	328,313	1,465,361	—	—	1,465,361
1907.....	218,385	707,835	507,006	524,246	1,957,472	—	—	1,957,472
1908.....	402,028	992,157	651,828	737,140	2,783,153	—	—	2,783,153
1909.....	513,604	1,249,192	584,873	844,602	3,192,271	—	—	3,192,271
1910.....	557,299	1,369,531	524,741	1,221,011	3,672,582	—	—	3,672,582
1911.....	555,438	1,519,528	659,270	1,295,556	4,029,792	—	—	4,029,792
1912.....	622,088	1,929,345	1,430,603	2,048,577	6,030,613	36,945	242,148	6,272,761
1913.....	722,002	2,913,135	2,075,375	2,649,910	8,360,422	42,163	461,260	8,821,682
1914.....	867,590	4,451,326	1,037,587	2,180,074	8,536,577	53,019	483,834	9,020,411
1915.....	980,296	3,997,392	1,009,025	2,441,780	8,428,493	70,349	512,334	8,940,827
1916.....	969,709	4,694,242	649,300	2,999,443	9,312,694	77,158	593,144	9,905,838
1917.....	1,104,156	4,954,200	—	4,213,371	10,271,727	83,496	704,485	10,976,212
1918.....	1,162,490	5,618,192	455,777	1,874,459	9,110,925	90,793	276,161	9,387,086
1919.....	1,255,094	7,121,046	1,105,602	2,012,422	11,494,164	83,925	235,741	11,849,905
1920.....	1,229,934	8,826,175	1,516,765	2,341,770	13,914,643	107,133	444,791	14,359,434

<sup>1</sup>The total expenditure for secondary schools was included in that of the elementary schools up to 1912.

<sup>2</sup>This item in 1918 and 1919 does not include money borrowed by note.



### 10.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901-1921.—continued

#### SASKATCHEWAN (EXPENDITURE).

Year.	Teachers' Salaries.	Officials' Salaries.	Paid on Deben- tures.	Paid on Notes (renewals and interest).	School buildings and repairs.	Care-taking and fuel.	Total Expendi- ture.	Secondary Schools.		Grand Total.
								Teachers' Salaries.	Total.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1906..	471,736	29,076	113,958	303,739	339,933	47,251	1,448,915	-	-	1,448,915
1907..	585,594	44,047	149,301	423,717	530,050	84,565	2,000,675	-	-	2,000,675
1908..	831,842	59,106	207,780	608,515	577,925	95,762	2,679,373	-	-	2,679,373
1909..	1,044,011	73,098	317,173	700,483	519,302	130,558	3,032,999	-	-	3,032,999
1910..	1,208,651	83,635	379,695	877,978	627,740	144,206	3,655,428	-	-	3,655,428
1911..	1,298,925	84,603	269,951	1,071,783	619,601	172,993	3,990,036	-	-	3,990,036
1912..	1,596,616	94,358	455,949	1,820,705	1,149,986	202,531	5,931,844	94,481	312,536	6,244,380
1913..	2,059,456	130,728	678,430	2,605,280	1,898,101	294,710	8,327,179	131,414	460,725	8,787,904
1914..	2,588,669	169,491	975,508	2,317,158	1,429,173	369,802	8,588,462	150,808	483,834	9,072,296
1915..	2,817,412	-	-	-	1,253,187	-	8,163,897	157,850	501,960	8,665,857
1916..	2,956,666	-	-	-	1,105,765	-	9,211,390	175,098	580,622	9,792,018
1917..	3,303,929	-	-	-	1,136,599	-	10,117,716	190,703	686,398	10,804,108
1918..	3,831,942	-	1,020,574	1,588,995	845,974	-	9,183,975	209,085	1,293,110	9,477,085
1919..	4,813,000	-	809,999	1,737,892	1,369,833	-	11,433,258	235,460	1,350,685	11,783,943
1920..	5,940,869	-	813,266	2,178,134	1,928,150	-	14,141,188	325,497	468,477	14,609,665

<sup>1</sup>The secondary school expenditure was included in that of the elementary schools until 1912; the items for 1918, 1919 and 1920 do not include promissory notes.

#### ALBERTA (RECEIPTS.)

Year.	Government Grants.	Local Assess- ments.	Proceeds of Deben- tures.	Borrowed by Note.	Other Sources.	Total.
	\$	\$	\$	\$	\$	\$
1906.....	142,836	416,344	297,158	292,786	140,797	1,289,921
1907.....	197,768	544,716	442,431	431,561	160,224	1,776,700
1908.....	220,712	917,515	764,069	539,939	106,382	2,548,617
1909.....	307,186	961,959	992,516	535,896	234,440	3,031,997
1910.....	301,239	1,278,013	673,333	848,625	86,155	3,187,365
1911.....	432,877	1,575,412	1,481,173	1,461,208	120,363	5,071,033
1912.....	414,116	1,793,480	1,491,498	2,665,063	262,761	6,626,918
1913.....	461,289	2,901,214	3,497,863	1,959,495	228,650	9,048,511
1914.....	507,682	3,028,776	966,350	2,771,380	279,324	7,553,512
1915.....	540,235	3,733,323	951,205	2,473,976	258,865	7,957,604
1916.....	553,141	3,749,007	155,883	1,105,538	1,203,814	6,767,383
1917.....	652,557	3,657,510	268,102	1,451,229	497,479	6,526,878
1918.....	625,830	5,132,232	433,126	1,173,546	195,990	7,560,724
1919.....	713,083	5,601,713	655,960	1,388,001	410,235	8,768,992
1920.....	885,524	6,894,401	865,195	1,948,257	279,776	10,873,153

#### ALBERTA (EXPENDITURE.)

Year.	Teachers' Salaries.	Officials Salaries.	Paid on Deben- tures.	Paid on Notes (renewals and interest).	School buildings and repairs.	Other Expen- diture.	Total Expen- diture.
	\$	\$	\$	\$	\$	\$	\$
1906.....	386,108	23,796	94,947	298,984	274,525	180,747	1,259,107
1907.....	497,746	36,755	131,488	295,517	486,824	345,623	1,793,953
1908.....	592,223	39,974	207,775	639,459	607,635	306,616	2,393,682
1909.....	758,816	52,785	244,185	574,725	638,065	407,282	2,735,858
1910.....	908,045	64,241	347,220	653,987	862,295	526,606	3,362,394
1911.....	1,144,584	87,409	408,442	1,309,134	1,223,142	853,062	5,025,773
1912.....	1,411,201	114,382	482,906	2,021,030	1,526,001	1,111,762	6,667,282
1913.....	1,672,526	180,165	594,051	3,160,030	1,816,203	1,261,211	8,684,186
1914.....	2,050,697	179,453	815,062	2,350,462	1,324,470	1,114,747	7,834,891
1915.....	2,244,964	185,616	1,065,437	2,731,279	443,641	1,294,533	7,965,470
1916.....	2,421,404	230,931	956,563	1,266,884	325,297	920,535	6,121,614
1917.....	2,620,085	193,484	1,100,181	1,068,058	414,105	1,199,649	6,595,562
1918.....	2,860,352	198,870	1,054,044	1,598,757	604,891	1,179,777	7,496,691
1919.....	3,560,318	225,242	1,051,171	1,503,944	765,935	1,698,919	8,805,529
1920.....	4,371,508	258,249	1,053,328	1,785,432	1,092,863	2,082,949	10,644,329

10.—Receipts and Expenditure for Public Education in Canada, by Provinces,  
1901-1921.—concluded.

BRITISH COLUMBIA (EXPENDITURE.)

Year.	Provincial Government.	Cities, Municipalities, Rural and Assisted Schools.	Total.	Year.	Provincial Government.	Cities, Municipalities, Rural and Assisted Schools.	Total.
	\$	\$	\$		\$	\$	\$
1901.....	350,532	182,160	532,692	1912.....	1,151,715	2,730,773	3,882,488
1902.....	438,086	150,482	588,568	1913.....	1,663,003	2,995,892	4,658,895
1903.....	473,802	130,556	604,358	1914.....	1,885,654	2,749,223	4,634,877
1904.....	453,313	144,451	597,764	1915.....	1,607,651	2,309,795	3,917,446
1905.....	479,158	249,891	729,049	1916.....	1,591,322	1,625,028	3,216,350
1906.....	444,543	244,198	688,741	1917.....	1,600,125	1,637,539	3,237,664
1907.....	474,608	390,163	864,771	1918.....	1,653,797	1,865,218	3,519,015
1908.....	544,672	675,838	1,220,510	1919.....	1,791,154	2,437,566	4,228,720
1909.....	626,074	921,626	1,547,700	1920.....	2,155,935	3,314,246	5,470,180
1910.....	818,576	1,098,660	1,917,236	1921.....	2,931,572	4,238,458	7,170,030
1911.....	1,001,808	1,639,714	2,641,522				

11.—Average Annual Salaries of School Teachers, by Provinces, 1920-21 or latest year reported.

Province and Class of Certificate.	Male.	Female.	Province and Class of Certificate.	Male.	Female.
Prince Edward Island, 1921—	\$	\$	Saskatchewan, 1920 <sup>2</sup> —	\$	\$
First class.....	886	650	Rural schools—		
Second class.....	574	503	First class.....	1,387	1,279
Third class.....	563	398	Second class.....	1,323	1,223
Nova Scotia, 1921—			Third class.....	1,273	1,171
Class A.....	1,471	907	Provisional.....	1,301	1,200
Class B.....	1,075	687	Cities, towns and villages—		
Class C.....	791	557	First class.....	1,881	1,352
Class D.....	547	431	Second class.....	1,677	1,217
Academic.....	1,882	1,292	Third class.....	1,351	1,123
New Brunswick, 1921—			Provisional.....	1,225	1,171
First class.....	1,525	965	Alberta, 1920—		
Second class.....	779	716	First class.....	1,676	1,224
Third class.....	570	577	Second class.....	1,209	1,123
Superior schools.....	1,281		Third class.....	1,152	1,069
Grammar schools.....	2,008		Permit.....	1,091	1,027
Quebec, 1920 <sup>1</sup> —			Specialist.....	2,178	1,583
Protestant schools.....	1,925	827	British Columbia, 1921—		
Roman Catholic schools.....	1,137	251	High schools—		
Ontario, 1920—			Academic.....	2,514	1,980
Public and Separate schools—			City graded schools—		
First class.....	1,960	898	Academic.....	2,453	1,393
Second class.....	1,101	844	First.....	2,375	1,411
Third class and district certificate.....	664	592	Second.....	1,682	1,278
High Schools and Collegiate Institutes, 1921—			Third.....	1,477	1,281
Principals.....	2,719		Rural Municipality schools—		
Assistants.....	2,471	1,900	Academic.....	1,504	1,158
Continuation Schools—			First.....	2,114	1,222
Principals.....	1,736		Second.....	1,694	1,134
Assistants.....	1,556	1,374	Third.....	1,194	1,072
Manitoba, 1918—			Rural and Assisted schools—		
Highest salary.....	3,600		Academic.....	1,445	1,178
Average salary for province.....	794		First.....	1,311	1,069
Average, cities and towns.....	962		Second.....	1,171	1,055
Highest rural school.....	1,000		Third.....	1,047	1,042
Average rural school.....	628				

<sup>1</sup> In the figures for Quebec lay teachers only are included. <sup>2</sup> In Saskatchewan, only elementary school teachers are included; in 1920 the average salary of secondary teachers was about \$2,222.

## 12.—Universities of Canada: Foundation, Affiliation, Faculties, and Degrees.

Name and Address.	Date of		Affiliation to other Universities.	Faculties.	Degrees.
	Original Founda- tion.	Present Charter.			
University of St. Dunstan's, Charlottetown, P.E.I.	1855	—	Laval.	Arts, Preparatory and Commercial, Theology.	B.L., B.A., B.Sc., Ph.M.
University of Kings' College, Windsor, N.S.	1789	1802	Oxford and Cambridge.	Arts, Law, Science, Divinity.	B.A., M.A., B.Sc., D.Sc., M.Sc., B.C.L., D.C.L., B.D., D.D.
Dalhousie University, Halifax, N.S.	1818	1863	Oxford and Cambridge.	Arts and Science, Law, Medicine and Dentistry.	B.A., M.A., B.Sc., L. Mus., M.Sc., B.Mus., Phm.B., LL.B., M.D., C.M., D.D.S., LL.D. (Hon.).
Acadia University, Wolfville, N.S.	1838	1840	Oxford, Dal- housie and McGill, Nova Scotia Tech- nical.	Arts, Divinity, Law, Science, Applied Science, Litera- ture.	B.A., B.Sc., B.Th., and M.A.
University of St. Francis Xavier, Antigonish, N.S.	1855	1909	—	Arts, Science, Engineering, Law.	B.A., M.A., B.Sc., LL.D.
University of New Brunswick, Fredericton, N.B.	1800	1860	Oxford, Cam- bridge, Dub- lin, McGill.	Arts, Applied Sci- ence, Partial Course in Law.	B.A., M.A., B.Sc., In Civil Engineer- ing, Electrical En- gineering or For- estry, D.Sc.
Mount Allison University Sackville, N.B.	1858	1886-1913	Dalhousie, Oxford and Cambridge.	Arts, Theology, Engineering.	B.A., M.A., B.Sc., B.D.
University of St. Joseph's College, St. Joseph, N.B.	1864	1898	Oxford.	Arts, Science.	B.A., B.S., B.L., B.C.S., M.A.
McGill University, Montreal, Que.	1821	1852	Acadia, Mount Allison, St. Francis Xavier, Al- berta, are affiliated to McGill in the Faculty of Applied Science.	Arts, Applied Science, Law, Medicine, Agriculture.	B.A., M.A., B.C.L., D.C.L., LL.D., B.Sc., D.Sc., D.D.S., M.Sc., Mus. Bac., Mus. Doc., B.S.A., D.Sc., B. Arch., M.D., C.M., D.Litt., Ph.D., LL.B., LL.M., B.Com., B.H.S.
University of Bishop's College, Lennoxville, Que.	1843	1853	Oxford and Cambridge.	Arts, Divinity, Medicine and Law	B.A., M.A., B.D., D.D., D.C.L., Mus., Bac., Mus. Doc., L.S.T.
Laval University, Quebec, Que.	1852	1852	—	Theology, Law, Medicine, Arts.	M.A., B.A., B.S., B.L., Ph.D., Ph.L., Ph.B., M.D., M.B., LL.B., LL.L., LL.D., D.B., D.L., D.D., C.L.B., C.L.L., C.L.D.
University of Montreal, Montreal, Que.	1878	1920	—	Theology, Law, Medicine, Arts, Domestic Science, Drawing, Relig- ious and Profane Music.	Bachelor, Licenci- ate, Doctor.

## 12.—Universities of Canada: Foundation, Affiliation, Faculties and Degrees—concluded.

Name and Address.	DATE OF		Affiliation to other Universities.	Faculties.	Degrees.
	Original Founda- tion.	Present Charter.			
University of Toronto, Toronto, Ont.	1827	1906	Oxford, Cam- bridge and Dublin.	Arts, Medicine, Ap- plied Science, Engi- neering, Agricul- ture, Forestry, Education, Household Science.	B.A., M.A., Ph.D., LL.B., LL. M., LL.D., Mus. Bac., Mus. Doc., M.B., M.D., B. A.Sc., M.A.Sc., C.E., E.E., M.E., B.Pæd., D. Pæd., B.S.A., B.Sc.A., B.Sc.F., F.E., D.D.S., Phm. B., B.V.Sc., D.V.Sc.
Victoria University, Toronto, Ont.	1836	1836	Toronto.	Arts and Theology.	B.D., D.D.
University of Trinity College, Toronto, Ont.	1851	1852	Toronto.	Arts and Divinity.	L.Th., B.D., D.D.
Western University, London, Ont.	1878	1908	—	Arts, Medicine and Public Health, Music.	B.A., M.A., M.D., LL.D., D.Sc., D.P.H., Mus. Bach.
Queen's University, Kingston, Ont	1841	1841	—	Arts, Science, Engineering, Medicine, Theology.	B.A., M.A., B.Sc., D.Sc., M.Sc., M.D., M.B., LL.D., B.D., D.D., B. Pæd., D. Pæd., B. Com.
University of Ottawa, Ottawa, Ont.	1849	1866	—	Theology, Philoso- phy, Law, Arts and Commercial.	LL.D., D.D., B.Ph., D.Ph., B.A., M.A.
McMaster University, Toronto, Ont.	1857	1887	Oxford, Cam- bridge, Lon- don.	Arts, Theology.	B.A., M.A., B.Sc., B.Th., B.D.
University of Manitoba, Winnipeg, Man.	1877	1877	—	Arts, Science, Law, Medicine, Engin- eering, Architec- ture, Pharmacy, Agriculture.	B.A., M.A., B.Sc., M.D., C.M., B.C.E., B.E.E., M.C.E., M.E.E., B.M.E., B. Arch., Phm.B., B.S.A., LL.B., LL.D.
University of Saskatche- wan, Saskatoon, Sask.	1907	1907	Oxford.	Arts, Science, Law, Agriculture, Engi- neering, Pharma- cy, Accounting, Education, Veterinary Medicine.	B.A., B.Sc., B.S.A., B.E., LL.B., M.A., M.Sc.
University of Alberta, Edmonton, Alberta.	1906	1910	Oxford, McGill and Toronto.	Arts and Sciences, Applied Science, Agriculture, Medi- cine, Dentistry, Law, Schools of Pharmacy and Accountancy.	B.A., B.Sc., M.A., B.S.A., M.Sc., LL.B., Phm. B., B.D., LL.D.
University of British Columbia, Vancouver, B.C.	1907	1908	—	Arts, Applied Sci- ence and Agricul- ture.	B.A., B.Sc.



## 13.—Universities of Canada: Number of Teaching Staff in the Various Faculties, 1920-1921.

Name and Address of University.	Sex.	PROFESSORS AND INSTRUCTORS.										Total (excluding duplicates).	
		Arts and Pure Science.	Engineer- ing.	Law.	Medi- cine.	Phar- macy.	Theo- logy.	All others.	Male.	Female.	Total.		
St. Dunstan's University, Charlottetown, P.E.I.....	M.	14	—	—	—	—	—	—	14	—	14	—	14
University of King's College, Windsor, N.S.....	F.	13	2	9	—	—	4	—	22	1	23	—	23
Dalhousie University, Halifax, N.S.....	F.	20	—	17	9	—	—	6	92	1	93	—	93
Acadia University, Wolfville, N.S.....	F.	17	3	—	—	—	3	—	23	1	24	—	24
University of St. Francis Xavier, Antigonish, N.S.....	F.	5	6	—	—	—	—	4	15	—	15	—	15
University of New Brunswick, Fredericton, N.B.....	M.	9	3	3	—	—	—	2	14	—	14	—	14
University of Mt. Allison, Sackville, N.B.....	F.	20	9	—	—	—	7	—	21	—	21	—	21
University of St. Joseph's College, St. Joseph, N.B.....	M.	36	—	—	—	—	—	—	36	—	36	—	36
McGill University, Montreal, Que.....	F.	40	42	17	120	7	—	88	307	37	344	—	344
Bishop's College, Lennoxville, Que.....	F.	9	—	—	1	—	4	—	9	—	9	—	9
University of Laval, Quebec, Que.....	M.	636	—	19	25	3	13	34	698	118	816	—	816
University of Montreal, Montreal, Que.....	F.	112	—	—	—	—	—	6	282	110	392	—	392
University of Toronto, Toronto, Ont.....	M.	22	25	17	82	6	15	105	282	110	392	—	392
Victoria University, Toronto, Ont.....	F.	168	78	—	201	—	—	125	509	50	559	—	559
University of Trinity College, Toronto, Ont.....	M.	23	1	—	3	—	11	20	29	2	31	—	31
Western University, London, Ont.....	F.	2	—	—	—	—	12	—	22	3	25	—	25
Queen's University, Kingston, Ont.....	M.	31	—	—	50	—	—	17	73	2	75	—	75
University of Ottawa, Ottawa, Ont.....	F.	75	66	—	47	—	5	102	166	3	169	—	169
McMaster University, Toronto, Ont.....	M.	75	—	—	—	—	12	18	87	84	171	—	171
University of Manitoba, Winnipeg, Man.....	F.	14	—	—	—	—	7	—	22	—	22	—	22
University of Saskatchewan, Saskatoon, Sask.....	M.	45	10	12	106	1	—	16	187	11	198	—	198
University of Alberta, Edmonton, Alberta.....	F.	10	7	6	—	2	—	45	62	18	80	—	80
University of British Columbia, Vancouver, B.C.....	M.	12	26	20	14	11	—	70	76	8	84	—	84
	F.	30	—	—	1	—	—	6	99	18	117	—	117
	F.	—	—	—	—	—	—	—	—	—	—	—	—
		1,007	578	120	689	31	93	792	2,885	467	3,352	—	3,352

14.—Universities of Canada: Number of Students by Academic Years, 1920-21.

Name of University.	Pre- para- tory.	First year.	Second year.	Third year.	Fourth year.	Fifth year.	Sixth year.	Seventh year.	Grad- uates.	All others.	Total.	NUMBER OF DEGREES CONFERRED.	
												Under- graduate.	Graduate. Total.
St. Dunstan's <sup>1</sup> .....	146	27	24	21	23	—	—	—	—	—	241	32	32
King's College.....	—	—	—	Not given by academic	—	—	—	—	—	—	151	21	23
Dalhousie.....	—	89	107	60	50	—	—	—	—	—	688	95	203
Acadia.....	102	87	33	20	30	—	—	—	4	23	333	50	84
St. Francis Xavier.....	—	50	46	24	16	—	—	—	—	24	323 <sup>2</sup>	28	30
New Brunswick.....	—	55	68	37	33	—	—	—	2	—	138	16	22
Mount Allison.....	—	130	19	12	16	14	—	—	4	62	250	26	52
St. Joseph's College <sup>1</sup> .....	209	682	746	472	344	107	—	—	—	—	400	13	16
McGill.....	3	18	23	17	1	—	—	—	50	644	3,045	392	421
Bishop's College.....	—	—	—	—	—	—	—	—	—	—	62	19	26
Laval.....	—	553	422	332	159	83	—	—	—	—	9,872	903	983
Montreal.....	97	1,244	1,221	742	608	131	1	—	—	1,865	3,511	200	405
Toronto.....	—	—	—	Not given by academic	—	—	—	—	181	961	5,060	930	1,006
Victoria.....	—	43	41	27	14	—	—	—	—	—	598	—	—
Trinity.....	—	—	—	Not given by academic	—	—	—	—	—	22	147	7	3
Western.....	—	—	—	Not given by academic	—	—	—	—	—	—	363	36	6
Queen's.....	—	350	274	222	191	50	—	—	11	1,253	2,351	201	42
Ottawa.....	1,764	—	68	38	43	39	—	—	4	67	2,743	58	14
McMaster.....	—	62	46	46	28	—	—	—	37	74	3,293	36	215
Manitoba.....	—	548	254	107	94	37	—	—	26	324	1,390	214	65
Saskatchewan.....	—	—	—	—	—	—	—	—	10	—	1,136	43	4
Alberta (1920).....	—	—	—	—	—	—	—	—	—	—	1,106	69	9
British Columbia.....	—	447	255	127	118	—	—	—	15	—	1,159 <sup>3</sup>	110	3
Total.....	2,321	5,105	3,647	2,304	1,768	461	1	—	344	5,319	35,369	3,549	515
													4,064

<sup>1</sup>The 95 students given by years are taking the ordinary 4 undergraduate years leading to a degree in Arts, Letters and Philosophy, which are the 4th, 5th, 6th and 7th years of St. Dunstan's. The 146 given above as preparatory students include 14 in preparatory work in St. Dunstan's, 21-1st year, 45-2nd, 32 in 3rd year and 34 in others. The same arrangement of years applies to St. Joseph's, N.B., and Ottawa. <sup>2</sup>Including 53 in short courses. <sup>3</sup>Including 197 in short courses.

## 15.—Universities of Canada: Number of Students

Name and Address of University.	Sex.	Courses leading to Matriculation and other Preparatory Courses.	Arts, Pure Science Philosophy, etc.		Agriculture.	Architecture.	Banking.	Commerce.	Dentistry.	Education.	Engineering.	Applied Science Unspecified.	Forestry.
			Undergraduate Courses.	Graduate Courses.									
St. Dunstan's University, Charlottetown, P.E.I.	M.	146	95	-	-	-	-	-	-	-	-	-	-
	F.	-	-	-	-	-	-	-	-	-	-	-	-
University of King's College, Windsor, N.S.	M.	51	7	-	-	-	-	-	-	-	18	-	-
	F.	22	-	-	-	-	-	-	-	-	-	-	-
Dalhousie University, Halifax, N.S.	M.	-	168	6	-	-	-	6	52	-	55	-	-
	F.	-	124	1	-	-	-	2	3	-	-	-	-
Acadia University, Wolfville, N.S.	M.	-	160	-	-	-	-	-	-	-	-	-	-
	F.	-	88	-	-	-	-	-	-	-	-	-	-
University of St. Francis Xavier, Antigonish, N.S.	M.	102	141	-	-	-	-	-	-	-	24	-	-
	F.	-	29	-	-	-	-	-	-	-	-	-	-
University of New Brunswick, Fredericton, N.B.	M.	-	28	-	-	-	-	-	-	-	52	-	32
	F.	-	26	-	-	-	-	-	-	-	-	-	-
University of Mt. Allison, Sackville, N.B.	M.	-	114	4	-	-	-	-	-	-	51	-	-
	F.	-	93	-	-	-	-	-	-	-	-	-	-
University of St. Joseph's College, St. Joseph, N.B.	M.	339	61	-	-	-	-	-	-	-	-	-	-
	F.	-	-	-	-	-	-	-	-	-	-	-	-
McGill University, Montreal, Que.	M.	-	300	38	126	17	-	151	120	-	659	-	-
	F.	-	237	12	3	-	-	3	-	-	-	-	-
University of Bishop's College, Lennoxville, Que.	M.	3	25	1	-	-	-	-	-	-	-	-	-
	F.	-	26	-	-	-	-	-	-	-	-	-	-
Laval University, Quebec, Que.	M.	6,610	1,985	37	-	79	-	-	-	-	-	-	18
	F.	658	-	40	-	-	-	-	-	-	-	-	-
University of Montreal, Montreal, Que.	M.	-	672 <sup>1</sup>	39	110	16	-	209	170	26	123	-	-
	F.	-	81	-	-	-	-	-	21	8	-	-	-
University of Toronto, Toronto, Ont.	M.	-	1,286	113	-	-	-	-	-	150	805	1	55
	F.	-	918	50	-	-	-	-	-	76	-	-	-
Victoria University, Toronto, Ont.	M.	-	294	167	-	-	-	-	-	-	-	-	-
	F.	-	223	-	-	-	-	-	-	-	-	-	-
University of Trinity College, Toronto, Ont.	M.	-	75	-	-	-	-	-	-	-	-	-	-
	F.	-	51	-	-	-	-	-	-	-	-	-	-
Western University, London, Ont.	M.	-	91	-	-	-	-	-	-	-	-	-	-
	F.	-	101	-	-	-	-	-	-	-	-	-	-
Queen's University, Kingston, Ont.	M.	-	234	11	-	-	380	29	-	-	397	-	-
	F.	-	212	-	-	-	-	-	-	-	-	-	-
University of Ottawa, Ottawa, Ont.	M.	752	178	4	-	-	-	-	-	-	-	-	-
	F.	1,732	10	-	-	-	-	-	-	-	-	-	-
McMaster University, Toronto, Ont.	M.	-	141	29	-	-	-	-	-	-	-	-	-
	F.	-	82	7	-	-	-	-	-	-	-	-	-
University of Manitoba, Winnipeg, Man.	M.	-	334	10	-	7	-	215	-	-	116	-	-
	F.	-	179	6	-	-	-	14	-	-	-	-	-
University of Saskatchewan, Saskatoon, Sask.	M.	-	208	8	-	176	-	-	-	-	36	-	-
	F.	-	109	2	-	-	-	-	-	-	-	-	-
University of Alberta, Edmonton, Alta.	M.	-	199	-	-	-	-	-	-	-	71	-	-
	F.	-	167	-	-	-	-	-	-	-	-	-	-
University of British Columbia, Vancouver, B.C.	M.	-	313	10	48	-	-	-	-	-	-	199	-
	F.	-	363	5	3	-	-	-	-	-	-	1	-
Total by sex.....	M.	8,003	6,437	476	284	295	380	610	342	176	2,407	199	105
	F.	2,412	3,038	214	6	-	-	19	24	84	1	1	-
Grand total.....		10,415	10,147 <sup>2,3</sup>	690	290	295	380	629	366	260	2,408	200	105

<sup>1</sup> 53 in St. Francis Xavier and 197 in British Columbia were not specified by sex.<sup>2</sup> Undergraduate students (672 in number) in Colleges annexed to University of Montreal were not specified by sex.<sup>3</sup> Exclusive of 407 men and 232 women in Arts, Pure Science, etc., registered at Victoria and Trinity as well as at Toronto with which Victoria and Trinity are in federation.

**in the Various Faculties, 1920-1921.**

Household Science.	Law.	Medicine.	Music.	Nursing.	Pharmacy.	Social Service.	Theology.	Veterinary Medicine.	Summer School for Teachers.	Summer School for other than Teachers.	Other Short Courses.	Correspondence.	Physical Education.	Unspecified.	Total excluding Duplicates.			Number of these also registered in affiliated Colleges.
															Male.	Female.	Total.	
-	572	3,088	212	-	434	74	652	32	299	88	250	402	-	840				-
235	593	3,240	995	181	454	637	657	34	583	109	250	759	70	1,224	25,860	9,259	35,369 <sup>1,2</sup>	12,645
-	51	-	-	-	-	-	18	-	-	-	-	-	-	-	241	-	241	-
-	66	150	-	-	22	-	-	-	-	-	-	-	-	-	129	22	151	-
-	2	9	-	11	2	-	7	-	-	-	-	-	-	-	525	163	688	-
-	-	-	-	-	76	-	-	-	-	-	-	-	-	-	243	90	333	-
-	-	-	-	-	-	-	-	-	-	-	53	-	-	-	241	29	323 <sup>1</sup>	-
-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	112	26	138	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166	93	259	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	400	-
122	126	700	97	37	35	3	8	-	8	73	-	-	70	-	2,356	689	3,045	-
-	6	12	-	-	4	69	16	-	1	-	-	-	-	-	36	26	62	-
48	81	123	-	-	10	-	168	-	-	-	-	-	-	15	9,166	706	9,872	9,151
60	118	349	200	169	33	299	20	-	60	-	-	-	-	20	1,881	1,630	3,511	672
-	-	1,038	680	-	106	-	-	-	21	-	-	61	-	435	3,458	1,602	5,060	845
-	-	89	12	126	2	348	-	-	-	-	104	-	-	205	375	223	598	-
-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	94	53	147	-
-	-	128	-	-	-	-	2	-	-	15	-	4	-	4	232	131	363	-
-	-	240	-	7	-	-	-	12	156	20	-	16	-	-	1,767	584	2,351	-
-	-	-	-	-	-	-	67	2	133	-	-	337	-	-	1,001	1,742	2,743	1,926
-	-	-	-	-	-	-	30	-	-	-	-	237	-	-	201	92	293	-
-	-	239	-	-	30	20	3	-	27	-	-	-	-	-	1,103	287	1,390	-
5	48	26	-	-	61	40	-	-	10	48	-	-	-	-	702	434	1,136	41
-	82	121	-	-	31	-	6	-	104	-	-	-	-	117	855	251	1,106	-
-	9	12	-	-	12	-	-	-	-	-	197	-	-	243	49	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	576	386	1,159 <sup>1</sup>	10



16.—Universities of Canada: Financial Statistics, 1920-21.

Name and Address.	Value of Endowments.	Value of Land and Buildings.	Value of Scientific Equip-ment.	Value of other Property.	Total Assets.	SOURCE OF INCOME.					EXPENDITURE.		
						Invest-ments.	Govern-ment and Municipal Grants.	Fees.	Other Sources.	Total Income.	Current.	Capital.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
St. Dunstan's University, Charlottetown, P.E.I.....	-	225,000	12,000	30,000	267,000	-	-	51,452	14,000	65,452	63,731	1,547	65,278
University of King's College, Windsor, N.S.....	-	300,000	40,000	-	340,000	9,300	-	28,000	13,800	51,100	48,755	-	48,755
Dalhousie University, Halifax, N.S.....	561,823	1,080,000	140,000	-	1,791,823	35,444	1,700	61,276	6,118	104,538	122,568	-	122,568
Acadia University, Wolfville, N.S.....	770,149	813,600	12,500	-	1,596,249	44,175	-	28,716	29,761	102,652	102,904	96,989	199,983
University of St. Francis Xavier, Antigonish, N.S.	106,476	319,327	3,825	-	429,628	5,897	-	46,865	27,681	80,443	71,242	9,200	80,442
University of New Brunswick, Fredericton, N.B....	24,617	500,000	100,000	100,000	724,617	2,583	25,000	12,110	134	39,827	38,974	-	38,974
Mt. Allison University, Sackville, N.B.....	397,607	161,622	500,000	20,000	1,079,229	24,683	-	15,794	47,447	87,924	83,505	-	83,505
University of St. Joseph's College, St. Joseph, N.B....	-	330,816	6,500	36,000	373,316	-	-	78,100	17,773	95,873	87,556	8,316	95,872
McGill University, Montreal, Que.....	13,791,412	7,688,012	856,179	-	22,335,603	734,368	45,105	464,015	133,511	1,376,999	1,815,220	7,367	1,322,587
University of Bishop's College, Lennoxville, Que.....	392,335	261,206	1,000	14,569	669,110	20,392	2,500	14,061	2,027	38,980	45,948	-	45,948
University of Laval, Quebec, Que.....	-	2,000,000	-	-	2,000,000	-	38,000	27,470	-	65,470	-	-	75,420
University of Montreal, Montreal, Que.....	1,555,000	1,800,000	200,000	-	3,555,000	95,301	26,750	125,217	10,460	257,728	250,625	-	250,625

University of Toronto, Toronto, Ont.	-	-	-	7,910,021	62,892	507,000	380,388	118,766	1,069,046	1,937,516	264,686	2,203,202
Victoria University, Toronto, Ont.	-	1,048,698	1,092,322	-	73,500	-	19,414	45,873	138,787	142,210	-	142,210
University of Trinity College, Toronto, Ont.	-	-	-	-	-	-	-	-	-	-	-	-
Queen's University, Kingston, Ont.	1,791,495	2,554,585	-	4,346,080	77,317	125,000	145,103	12,619	360,039	374,841	-	374,841
Western University, London, Ont.	-	500,000	-	500,000	-	138,000	23,000	491,000	653,000	203,000	450,000	653,000
University of Ottawa, Ottawa, Ont.	-	651,300	-	651,300	-	-	103,664	55,330	158,994	155,356	-	155,356
McMaster University, Toronto, Ont.	1,022,158	466,830	20,267	1,509,255	58,368	-	30,122	-	88,490	91,001	-	91,001
University of Manitoba, Winnipeg, Man.	1,089,235	1,025,632	-	2,167,580	65,000	443,284	66,294	23,417	597,995	352,384	262,209	614,593
University of Saskatchewan, Saskatoon, Sask.	28,871	2,485,745	-	2,522,616	1,832	478,365	24,573	4,750	509,520	485,213	303,889	789,102
University of Alberta, Edmonton, Alta. (1919).	-	3,174,609	184,538	3,359,147	-	266,635	12,473	92,779	371,887	196,212	-	196,212
University of British Columbia, Vancouver, B.C. (1920).	10,468	306,629	86,343	513,863	-	388,000	13,479	21,593	423,072	295,513	74,453	369,966
<b>Total Universities...</b>	<b>22,590,344</b>	<b>27,747,235</b>	<b>2,163,152</b>	<b>60,782,457</b>	<b>1,311,052</b>	<b>2,486,339</b>	<b>1,771,586</b>	<b>1,168,839</b>	<b>6,737,816</b>	<b>6,464,364</b>	<b>1,478,656</b>	<b>8,018,440</b>

<sup>1</sup>Including \$7,910,021 not itemized by University of Toronto.

<sup>2</sup>Including \$75,420 not itemized as current and capital expenditure by Laval.

## 17.—Colleges of Canada: Foundation, Affiliation, Faculties and Degrees.

Name and Address.	DATE OF		University Affiliation.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
Prince of Wales College, Charlottetown, P.E.I.	1836	1860	Practically all Canadian Universities.	Arts.	—
Presbyterian College, Halifax, N.S.	1820	—	Dalhousie.	Theology.	D.D., B.D.
College of Saint Anne, Church Point, N.S.	1890	1892	—	Arts, Science.	B.A., B. Sc., M.A.
Technical College, Halifax, N.S.	1907	—	Acadia, King's, St Mary's, Dalhousie, Mt. Allison, St. Francis Xavier.	Engineering.	B. Sc. in M.E., C. E., E.E., Mch. E.
Agricultural College, Truro, N.S.	1888	1905	—	Agriculture.	Associate Diploma.
Holy Heart Theological College, Halifax, N.S.	1894	1906	—	Theology, Philosophy.	T.B., T.L., D.D., Ph. D.
St. Mary's College, Halifax, N.S.	1841	1841	—	Arts, Partial Course in Engineering.	B.A.
Macdonald College, Ste. Anne de Bellevue, Que.	1907	—	McGill.	Agriculture, Household Science.	M.S.A., B.H.S., B.S.A., B. Sc. in Agr.
Ecole Des Hautes Etudes Commerciales, Montreal, Que.	1907	1907	Laval.	Commerce.	L.S.C., C.L.
Stanstead Wesleyan College, Stanstead, Que.	1872	1872	—	Arts, Commercial, Music.	Diploma.
Presbyterian College, Montreal, Que.	1865	1865	McGill.	Theology.	B.D., D.D.
Congregational College of Canada, Montreal, Que.	1839	Amended 1864 & 1889	McGill.	Theology.	B.D., D.D.
Montreal Diocesan Theological College, Montreal, Que.	1873	1879	McGill.	Divinity.	B.D., D.D.
Wesleyan Theological College, Montreal, Que.	1872	1879	McGill.	Theology.	B.D., S.T.D., D.D.
Wycliffe College, Toronto, Ont.	1879	1916	Toronto.	Theology.	L. Th., B.D., D.D.
Knox College, Toronto, Ont.	1843	1858	Toronto.	Theology.	B.D., D.D.
St. Michael's College, Toronto, Ont.	1852	—	Toronto.	Arts.	B.A., M.A., Ph. D.
Ontario Agricultural College, Guelph, Ont.	1874	1874	Toronto.	Agriculture, Domestic Science, Manual Training.	B.S.A.
Ontario College of Art, <sup>2</sup> Toronto, Ont.	1912	1912	—	—	Diploma.
Ontario Law School, Osgoode Hall, Toronto, Ont.	—	—	—	—	—
Toronto Bible College, Toronto, Ont.	—	—	—	—	—
Ontario College of Pharmacy, Toronto, Ont.	1871	1884	Toronto.	Pharmacy.	—
Royal College of Dental Surgeons of Ontario, Toronto, Ont.	1868	1911	Toronto.	Dentistry.	L.D.S. <sup>4</sup>
Ontario Veterinary College, Toronto, Ont.	1862	Taken over by Government in 1908	Toronto.	Veterinary.	V.S. <sup>5</sup>
Waterloo College, Lutheran Theological Seminary, Waterloo, Ont.	1911	1912	—	Arts, Theology.	B.A., M.A.
Huron College, London, Ont.	1863	1863	Western University.	Theology.	Diploma with title L. Th. <sup>6</sup>
St. Jerome's College, Kitchener, Ont.	1864	1866	—	Arts, Scholastic Philosophy.	—
Royal Military College, Kingston, Ont.	1875	—	—	—	Diploma and Diploma with Honours.

## 17.—Colleges of Canada: Foundation, Affiliation, Faculties and Degrees—concluded.

Name and Address.	DATE OF		University Affiliation.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
Brandon College, Brandon, Man.	1899	—	McMaster.	Arts, Theology, Academic, Business, Music.	B.A. by McMaster University.
The Manitoba Law School, Winnipeg, Man.	1914	—	Manitoba.	Law.	LL.B. by University.
Wesley College, Winnipeg, Man.	1877	1877	Manitoba.	Arts, Theology, Matriculation.	B.D., D.D. <sup>1</sup>
Manitoba College, Winnipeg, Man.	1871	—	Manitoba.	Theology.	B.D.
Manitoba Agricultural College, Winnipeg, Man.	1903	—	Manitoba.	Agriculture, Home Economics.	B.S.A.
St. John's College, Winnipeg, Man.	1866	—	Manitoba.	—	B.D.
Emmanuel College, Saskatoon, Sask.	1879	1883	Saskatchewan.	Divinity.	L.Th., B.D., D.D.
Presbyterian Theological College, Saskatoon, Sask.	1911	—	Saskatchewan.	Divinity.	B.D., D.D.
St. Chad's College, Regina, Sask.	1907	—	Saskatchewan.	Divinity.	—
Edmonton Jesuit College, Edmonton, Alberta.	1913	1913	Laval.	Preparatory, Commercial, Classical.	—
Robertson College, Edmonton (South), Alberta.	1910	1916	Alberta.	Theology.	D.D.
Institute of Technology and Art, Calgary, Alberta.	1916	—	—	Technical Courses.	—
The Anglican Theological College, Vancouver, B.C.	—	—	—	—	—
Columbia Methodist College, New Westminster, B.C.	1892	1893	Toronto.	Academic, Music, Business.	Diplomas.
Royal Naval College, Esquimalt, B.C.	1911	—	—	—	Midshipman, R.C. N.
Victoria College, Victoria, B.C.	—	—	British Columbia.	Arts and pure Science.	—

<sup>1</sup>Degrees conferred by the University of Toronto. <sup>2</sup>Succeeding Ontario School of Art founded in 1876. <sup>3</sup>The University of Toronto grants the degree Ph.D. <sup>4</sup>The degree of D.D.S. is conferred by the University of Toronto. <sup>5</sup>The degrees of B.V.Sc. and D.V.Sc. are conferred by the University of Toronto. <sup>6</sup>Degrees in Arts and Theology are conferred by the Western University. <sup>7</sup>The degree of B.A. is conferred by the University of Manitoba.

## NOTE.—

In addition to the above colleges there are 21 classical colleges and 2 agricultural colleges in the province of Quebec. The classical colleges with the dates of their foundation are as follows: Chicoutimi (1873), Joliette (1846), L'Assomption (1832), Lévis (1853), Mont Laurier (1910), Montreal (Loyola) (1896), Montreal (Ste. Marie) (1848), Montreal (St. Sulpice) (1767), Nicolet (1803), Quebec Petit Séminaire (1663), Rigaud (1851), Rimouski (1855), St. Alexandre de la Gatineau (1911), Ste. Anne de la Pocatière (1827), St. Hyacinthe (1811), St. Jean (1911), St. Laurent (1847), Ste. Thérèse (1825), Sherbrooke (1875), Trois Rivières (1860) and Valleyfield (1893). The two agricultural colleges are the Institut d'Oka and the agricultural school at Ste. Anne de la Pocatière. Of the 9,033 pupils in the classical colleges in 1921, 804 were in primary courses, 2,539 in commercial courses and 5,690 in classical courses. Of the last mentioned 650 were in colleges affiliated or annexed and 114 in colleges associated with Laval University. These were evidently doing work of university grade.



**18.—Professional and Affiliated Colleges of Canada: Number of Teaching Staff and Students, 1920-21.**

Name and Address.	Number of Teaching Staff.			Number of Students.		
	Male.	Female.	Total.	Male.	Female.	Total.
Prince of Wales College, Charlottetown, P.E.I.....	7	5	12	78	163	241
Presbyterian College, Halifax, N.S., (1920).....	4	-	4	-	32	32
College of Ste. Anne, Church Point, N.S.....	10	-	10	130	-	130
Technical College, Halifax, N.S.....	8	-	8	33	-	33
Agricultural College, Truro, N.S.....	16	2	18	388	170	558
Holy Heart Theological College, Halifax, N.S.....	7	-	7	92	-	92
St. Mary's College, Halifax, N.S.....	12	-	12	195	-	195
Macdonald College, Ste. Anne de Bellevue, Que.....	46	19	65	204	299	503
Ecole des Hautes Etudes Commerciales, Montreal, Que.....	22	-	22	253	-	253
Stanstead Wesleyan College, Stanstead, Que.....	5	4	9	141	113	254
Presbyterian College, Montreal, Que.....	5	-	5	48	-	48
Congregational College of Canada, Montreal, Que....	2	-	2	15	-	15
Montreal Diocesan Theological College, Montreal, Que.....	4	-	4	20	-	20
Wesleyan Theological College, Montreal, Que.....	3	-	3	128	-	128
Chicoutimi Classical College.....	45	-	45	600	-	600
Joliette Classical College.....	46	-	46	405	-	405
L'Assomption Classical College.....	46	-	46	363	-	363
Lévis Classical College.....	51	-	51	694	-	694
Mont Laurier Classical College.....	18	-	18	150	-	150
Montreal (Loyola) Classical College.....	22	-	22	348	-	348
Montreal (Ste. Marie) Classical College.....	41	-	41	603	-	603
Montreal (St. Sulpice) Classical College.....	25	-	25	351	-	351
Nicolet Classical College.....	42	-	42	373	-	373
Quebec (Petit Sém.) Classical College.....	44	-	44	781	-	781
Rigaud Classical College.....	40	-	40	316	-	316
Rimouski Classical College.....	40	-	40	308	-	308
St. Alexandre de la Gatineau Classical College.....	15	-	15	208	-	208
Ste. Anne de la Pocatière Classical College.....	47	-	47	644	-	644
St. Hyacinthe Classical College.....	39	-	39	478	-	478
St. Jean Classical College.....	31	-	31	279	-	279
St. Laurent Classical College.....	54	-	54	514	-	514
Ste. Thérèse Classical College.....	38	-	38	366	-	366
Sherbrooke Classical College.....	47	-	47	515	-	515
Trois Rivières Classical College.....	35	-	35	452	-	452

**18.—Professional and Affiliated Colleges of Canada: Number of Teaching Staff and Students, 1920-21—concluded.**

Name and Address.	Number of Teaching Staff.			Number of Students.		
	Male.	Female.	Total.	Male.	Female.	Total.
Valleyfield Classical College.....	31	—	31	285	—	285
Oka Agricultural School.....	17	—	17	121	—	121
Ste. Anne de la Pocatière Agricultural School.....	16	—	16	82	—	82
Wycliffe College, Toronto, Ont.....	11	1	12	59	—	59
Knox College, Toronto, Ont.....	9	—	9	130	75	205
St. Michael's College, Toronto, Ont.....	25	12	37	367	117	484
Ontario Agricultural College, Guelph, Ont.....	65	13	78	1,237	539	1,776
Ontario College of Art, Toronto, Ont.....	7	7	14	189	371	560
Ontario College of Pharmacy, Toronto, Ont.....	4	—	4	158	10	168
Ontario Law School, Osgoode Hall, Toronto, Ont....	7	—	7	420	16	436
Toronto Bible College, Toronto, Ont.....	6	—	6	147	330	477
Royal College of Dental Surgeons, Toronto, Ont....	79	1	80	873	17	890
Ontario Veterinary College, Toronto, Ont.....	23	—	23	96	—	96
Waterloo College, Lutheran Theological Seminary, Waterloo, Ont.....	6	—	6	56	—	56
Huron College, London, Ont.....	5	—	5	23	—	23
St. Jerome's College, Kitchener, Ont.....	10	—	10	200	—	200
Royal Military College, Kingston, Ont.....	22	—	22	163	—	163
Brandon College, Brandon, Man.....	18	5	23	119	140	371 <sup>1</sup>
Manitoba Law School, Winnipeg, Man.....	21	—	21	102	2	104
Wesley College, Winnipeg, Man.....	22	—	22	245	135	380
Manitoba College, Winnipeg, Man.....	5	1	6	12	5	17
Manitoba Agricultural College, Winnipeg, Man.....	50	12	62	621	391	1,012
St. John's College, Winnipeg, Man.....	—	—	—	—	—	—
Emmanuel College, Saskatoon, Sask.....	3	—	3	18	—	18
Presbyterian Theological College, Saskatoon, Sask..	4	—	4	43	1	44
St. Chad's College, Regina, Sask.....	7	1	8	7	—	7
Edmonton Jesuit College, Edmonton, Alberta.....	20	—	20	226	—	226
Robertson College, Edmonton (South), Alberta....	2	—	2	21	—	21
Institute of Technology and Art, Calgary, Alberta...	19	—	19	657	—	657
The Anglican Theological College of B.C., Vancouver, B.C.....	4	—	4	13	—	13
Columbia Methodist College, New Westminster, B.C.....	9	12	21	61	104	165
Royal Naval College, Esquimalt, B.C.....	6	—	6	45	—	45
Victoria College, Victoria, B.C.....	3	2	5	35	40	75
<b>Total.....</b>	<b>1,453</b>	<b>97</b>	<b>1,550</b>	<b>17,336</b>	<b>3,038</b>	<b>20,486<sup>1</sup></b>

<sup>1</sup> 112 not given by sex.

## 19.—Colleges of Canada:

No.	Name and Address.	Value of Endowment.	Value of Land and Buildings.	Value of Scientific Equipment.	Value of other Property.
		\$	\$	\$	\$
1	Prince of Wales College, Charlottetown, P.E.I.....	—	450,000	2,000	—
2	Presbyterian College, Halifax, N.S. (1920).....	149,042	180,000	—	—
3	College of Ste. Anne, Church Point, N.S. ....	—	190,200	1,260	1,550 <sup>1</sup>
4	Technical College, Halifax, N.S. ....	—	240,000	200,000	—
5	Agricultural College, Truro, N.S. ....	—	400,000	25,000	—
6	Holy Heart Theological College, Halifax, N.S. ....	—	400,000	—	—
7	St. Mary's College, Halifax, N.S. ....	—	150,000	2,500	—
8	Macdonald College, Ste. Anne de Bellevue, Que. ....	4,000,000	3,500,000	250,000	—
9	Ecole des Hautes Etudes Commerciales, Montreal, Que. ....	—	640,444	25,029	—
10	Stanstead Wesleyan College, Stanstead, Que. (1920).....	154,328	210,500	—	—
11	Presbyterian College, Montreal, Que. ....	368,403	213,489	200	10,000
12	Montreal Diocesan Theological College, Montreal, Que. ....	191,672	105,927	—	7,969
13	Congregational College of Canada, Montreal, Que. ....	139,105	133,035	5,000	—
14	Wesleyan Theological College, Montreal, Que. ....	129,552	300,000	—	—
15	Wycliffe College, Toronto, Ont. ....	291,245	224,814	—	27,394
16	Knox College, Toronto, Ont. ....	458,932	703,000	—	—
17	St. Michael's College, Toronto, Ont. (1920).....	—	585,000	—	—
18	Ontario Agricultural College, Guelph, Ont. (1920)....	—	2,000,000	—	—
19	Ontario College of Art, Toronto, Ont. ....	—	124,781	—	—
20	Ontario College of Pharmacy, Toronto, Ont. ....	12,080	50,337	10,329	—
21	Ontario Law School, Toronto, Ont. ....	—	—	—	—
22	Toronto Bible College, Toronto, Ont. ....	25,000	—	—	100,000
23	Royal College of Dental Surgeons of Ontario, Toronto, Ont. ....	—	370,000	80,000	—
24	Ontario Veterinary College, Toronto, Ont. ....	—	—	—	—
25	Waterloo College, Lutheran Theological Seminary, Waterloo, Ont. ....	—	60,466	1,000	—
26	Huron College, London, Ont. ....	64,026	50,030	—	—
27	St. Jerome's College, Kitchener, Ont. ....	—	—	—	—
28	Royal Military College, Kingston, Ont. ....	—	—	—	—
29	Brandon College, Brandon, Man. ....	102,230	222,416	7,813	—
30	The Manitoba Law School, Winnipeg, Man. ....	—	—	—	—
31	Wesley College, Winnipeg, Man. ....	155,910	707,000	1,000	10,000
32	Manitoba College, Winnipeg, Man. ....	149,866	400,000	—	181,000
33	Manitoba Agricultural College, Winnipeg, Man. ....	—	4,056,474	—	—
34	St. John's College, Winnipeg, Man. (1919).....	200,000	250,000	—	—
35	Emmanuel College, Saskatoon, Sask. ....	—	70,300	—	—
36	Presbyterian Theological College, Saskatoon, Sask. ....	—	26,000	—	—
37	St. Chad's College, Regina, Sask. ....	11,000	140,000	—	—
38	Edmonton Jesuit College, Edmonton, Alberta. ....	—	175,000	1,000	14,000
39	Robertson College, Edmonton (South), Alberta. ....	4,000	12,000	1,000	—
40	Institute of Technology and Art, Calgary, Alta. ....	—	93,575	56,519	1,556
41	Anglican Theological College of B.C., Vancouver, B.C. ....	43,882	20,347	—	—
42	Columbia Methodist College, New Westminster, B.C. ....	10,000	135,269	—	—
43	Royal Naval College, Esquimalt, B.C. ....	—	—	—	—
44	Victoria College, Victoria, B.C. ....	—	—	—	—
	<b>Total</b> .....	<b>6,710,333</b>	<b>17,464,639</b>	<b>669,650</b>	<b>193,469</b>

<sup>1</sup>Including \$300,000 not specified by St. Jerome's College. <sup>2</sup>Including \$153,985 not specified by Manitoba Agricultural College. <sup>3</sup>Net expenditure after receipts from farm to the amount of \$18,509, forwarded to the Government, were deducted.

## Financial Statistics, 1920-21.

Total Value of Property.	Sources of Income.				Total Income.	Expenditure.			No.
	Invest- ments.	Government Grants.	Fees.	Other Sources.		Current.	Capital.	Total.	
\$	\$	\$	\$	\$	\$	\$	\$	\$	
452,000	-	25,000	1,400	-	26,400	22,000	3,000	25,000	1
329,042	12,379	-	-	14,004	26,383	-	-	-	2
106,010	-	-	19,545	10,357	29,902	28,780	-	28,780	3
440,000	-	56,756	-	-	56,756	56,756	1,732	58,488	4
425,000	-	77,156	-	-	77,156	58,647	1,115	59,762	5
400,000	-	-	12,500	3,000	15,500	17,800	-	17,800	6
152,500	500	-	21,000	5,500	27,000	25,000	10,000	35,000	7
7,750,000	205,363	11,500	14,667	135,000	368,530	356,030	12,500	368,530	8
665,473	-	60,000	6,940	1,166	68,106	80,377	-	80,377	9
365,128	4,303	800	55,597	8,863	67,563	81,608	-	81,608	10
592,092	16,435	-	4,000	300	20,735	26,945	-	26,945	11
305,568	11,183	-	8,975	6,307	26,465	26,415	-	26,415	12
244,105	7,561	-	-	6,413	13,974	13,107	2,375	15,482	13
429,552	6,482	-	307	18,000	24,789	25,317	-	25,317	14
543,453	18,401	-	150	64,386	82,937	67,381	14,506	81,787	15
1,158,932	26,952	-	116	41,030	68,098	52,156	20,330	72,486	16
585,000	-	-	24,900	8,750	33,650	33,650	-	33,650	17
2,000,000	-	139,771	18,416	-	158,187	471,068	-	471,068	18
124,781	-	25,000	6,644	191	31,835	26,808	4,857	31,665	19
72,746	557	-	41,393	6,347	48,297	35,264	-	35,264	20
-	-	-	-	-	-	-	-	-	21
125,000	2,042	-	920	12,088	15,050	15,030	-	15,030	22
450,000	-	-	189,633	29,571	219,204	165,077	119,142	284,219	23
-	-	42,850	8,100	-	50,950	42,850	-	42,850	24
61,466	-	-	2,400	11,240	13,640	13,278	-	13,278	25
114,026	5,649	-	909	9,364	15,922	19,547	-	10,547	26
300,000	-	-	40,000	3,000	43,000	38,000	-	38,000	27
-	-	-	-	-	-	-	-	-	28
332,459	5,028	-	26,271	64,808	96,107	70,831	21,495	92,326	29
873,970	9,744	-	7,172	3,167	10,339	10,623	-	10,623	30
617,886	11,956	-	11,000	37,802	58,546	49,099	-	49,099	31
4,956,474	-	-	-	11,304	23,260	33,860	-	33,860	32
450,000	-	-	-	-	153,985	325,321	19,307	344,628	33
70,300	747	-	2,000	9,000	11,000	-	-	-	34
26,000	-	-	750	18,384	19,881	19,794	-	19,794	35
151,000	548	-	150	12,124	12,274	11,572	900	12,172	36
190,000	-	-	350	6,165	7,063	7,852	-	7,852	37
17,000	242	-	48,224	6,298	54,522	51,797	-	51,797	38
151,650	-	-	-	9,000	9,242	6,242	-	6,242	39
-	-	-	1,540	-	1,540	9,939	75,625	85,564	40
64,229	3,667	-	1,435	6,787	11,889	11,566	3,200	14,766	41
145,269	458	1,311	37,911	25,822	65,502	46,841	18,661	65,502	42
-	-	-	-	-	-	-	-	-	43
-	-	-	-	-	-	-	-	-	44
25,338,111	352,197	440,144	615,315	603,538	2,165,179	2,445,128	328,745	2,773,873	



### PUBLIC LIBRARIES IN CANADA.

Although in the early history of this country there are records of several libraries of varying types, it was not until the year 1800 that the first public library in Canada was founded at Niagara. During the first quarter of the 19th century libraries had their beginning in Quebec and Montreal and in Halifax and Yarmouth in Nova Scotia, while there is a record of a circulating library in Western Canada as early as 1824. Nearly all of these libraries have continued to exist in some form—either separately or in amalgamation—until the present time.

Ontario was the first province to make legislation for the benefit of libraries. In 1835 the Government of Upper Canada made grants to Mechanics' Institutes, which were really library associations. These grants were continued until 1857, then withdrawn until they were restored by the Ontario Government in 1868, in which year an Association of Mechanics' Institutes of Ontario was organized, continuing until 1886. During these years several acts were passed concerning these institutes, but the most important legislation was the Ontario Public Libraries Act of 1895, which changed the name of "Mechanics' Institute" to "Public Library." The revised Ontario Public Libraries Act of 1920 is chiefly important for the change made in grants and rate of taxation to be levied for library purposes. Both Saskatchewan and Alberta have Public Libraries Acts (passed respectively in 1906 and 1907) based, as is also the Free Libraries Act of Manitoba (passed in 1899), on the Ontario Act. The Free Libraries Act of British Columbia was passed in 1891. Quebec, in 1890 (2c.34) passed an Act to authorize city, town and village corporations to aid in the support of libraries. The Yukon Ordinance No. 20, 1903, provides for the management of free public libraries in Dawson City. There is no public library legislation in the Maritime provinces.

The Mechanics' Institutes of Upper and Lower Canada were modelled after that founded in England by Dr. Birkbeck. Their purpose was to provide lectures and study classes and a suitable reference library for labouring men and women. The early history of these institutes in Ontario shows that the use made of the libraries was small; but the provision in 1872 for inspection of these institutes, followed shortly afterwards by permission to include a larger range of literature in their libraries, helped materially in increasing the use made of the latter. The result of the Act of 1895 may be seen from the fact that, while in 1883 there was one public library, and in 1895 only 12, in 1896 there were 54, and in 1902 as many as 140 free libraries.

Travelling libraries commenced in 1890, when the Aberdeen Association was organized in Winnipeg with the purpose of distributing literature among the scattered settlers in the Canadian West. Branches of the association were gradually formed in various cities throughout the Dominion and one in England, while the headquarters were at Ottawa. A new work in travelling libraries was begun in 1897 among the sailors, under the auspices of the Upper Canada

Tract Society. In the following year the Government of British Columbia began work among the mining camps and agricultural districts. This work has grown steadily. In 1900 work was commenced with travelling libraries contributed by the Canadian Club of Toronto and by McGill and Queen's universities. In the next year the Canadian Reading Camp Association was formed, and by this Association the Frontier College was established with the aim of placing a reading room or tent in every frontier camp in Canada. This College was incorporated by a Dominion Act of 1922 and receives a grant through the Ontario Department of Education. In addition McGill University has an excellent system of travelling libraries, as has also the University of Alberta; while in Ontario and Saskatchewan similar work is carried on under government auspices. In Nova Scotia the Women's Institutes, through the Provincial Department of Agriculture, have made considerable use of the McGill libraries.

The Ontario Library Association, the first library association in Canada, was organized in 1901, while British Columbia formed an Association in 1911, Saskatchewan in 1914, the Maritimes, for the three maritime provinces, in 1918, and Alberta in 1920. The Pacific Northwest Association, organized in 1909, has an international membership.

There are two library schools in Canada: one connected with McGill University, founded in 1905, and one held in Toronto by the Ontario Department of Education since 1910. The course at McGill has always been a short summer course, lasting one month. The Ontario school has been of varying lengths: one month, 6 weeks, 2 months, and, since 1919, 3 months.

Up to the year 1919 the amount of \$3,032,910 had been promised by the trusts established by Andrew Carnegie in 146 grants for the erection of 155 library buildings. Of these buildings 114 had been erected at an expenditure of \$2,393,410.

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## VII.—CLIMATE AND METEOROLOGY.

### THE CLIMATE OF CANADA SINCE CONFEDERATION.

By SIR FREDERIC STUPART, Director, Dominion Meteorological Service, Toronto.

It has been proved by geologists that in geological time the climate of the world has undergone great changes, and many historians and archaeologists have in recent years carried on investigations as to whether in historical times there has been any appreciable change in the climates of the countries for which exist either written records or evidences provided by the remains of man's handiwork.

Some, for instance, are of the opinion that there are evidences of increasing desiccation in Asia and southern Europe, while in the western hemisphere, in Central America and adjacent territories, the disappearance of a by-gone civilization has been explained as resulting from a change of climate which has rendered uninhabitable a land obviously once well suited to man's best desires.

It has, however, been found that there are many conflicting data, and as the question stands to-day the general consensus of opinion is that while there have been pulsations of both long and short periods during which departures from averages have been quite pronounced, both as regards temperature and precipitation, yet there have not been appreciable progressive changes in either direction.

In view of these facts, we may be fairly sure that in the seasons in Canada of the more than fifty years since Confederation there have been variations such as have occurred down through the centuries and will occur in the future, but we need not expect to find any marked, climatic change. There is, however, one factor which may have to some extent affected the climate of eastern Canada. That is deforestation, and yet, be it said in a somewhat guarded manner, the records that we possess do not indicate that this factor is as important as it was once thought to be.

**Temperature.**—On an inspection of the charts showing the curves of winter temperature for the different parts of Canada during the past 50 years, the most obvious fact is that the variations from average are largest in the western provinces and that they diminish gradually eastward toward the Atlantic coast. At Edmonton the mean temperature of the winter of 1887 was  $-4^{\circ}$ , while that of 1889 was  $22^{\circ}$ ; the lowest winter monthly average,  $-14^{\circ}$ , occurred in January, 1886, and the highest winter monthly,  $22^{\circ}$ , occurred in both January and February, 1889. Winnipeg shows even a greater range, with a mean winter temperature of  $-9^{\circ}$  in 1887, and a mean of  $19^{\circ}$  in 1878. The lowest monthly mean was  $-16^{\circ}$  in January, 1883, and the highest  $23^{\circ}$  in February, 1878.

At Toronto the coldest winters were those of 1875 and 1904 with a mean of  $17^{\circ}$ , followed closely by 1885 and 1918 with a mean of  $18^{\circ}$ . The warmest winter was 1890 with a mean of  $31^{\circ}$  and the next warmest 1919 with a mean of  $30^{\circ}$  and 1921 with a mean of  $29^{\circ}$ , which give a difference of  $14^{\circ}$  between the warmest and the coldest winters. The coldest monthly mean recorded was  $10.2^{\circ}$  in February, 1875, the warmest January mean was  $33^{\circ}$  in 1880 and the warmest February was  $30^{\circ}$  in 1882.

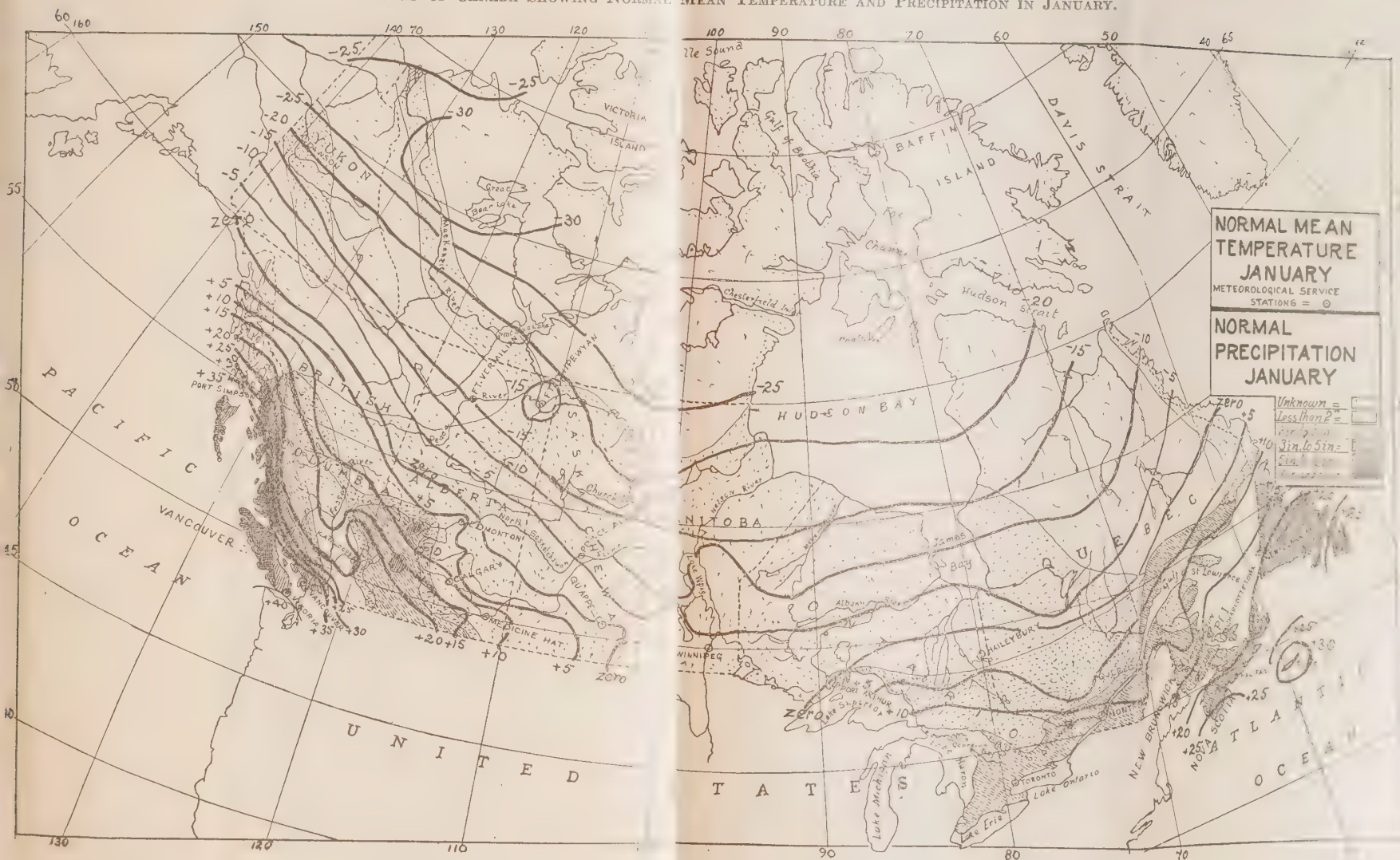
At Montreal the coldest winter means were  $10^{\circ}$  in 1875, 1904 and 1905 and the warmest  $21^{\circ}$  in 1878 and 1892; the coldest January was  $4^{\circ}$  in 1888 and also in 1893, and the warmest  $22^{\circ}$  in both 1880 and 1913. The coldest February was  $6^{\circ}$  in 1885 and the warmest  $27^{\circ}$  in 1877.

In Nova Scotia, as represented by Halifax, the coldest winters were those of 1868 and 1905, with mean temperatures of  $18^{\circ}$ , and the warmest were those of 1870 and 1889, each with a mean temperature of  $28^{\circ}$ . The coldest January was that of 1920 with a temperature of  $14^{\circ}$ , and the coldest Februaries were those of 1868, 1875, 1904, 1905, 1911 and 1914, each with a mean of  $18^{\circ}$ .

The lowest temperatures on record at various stations in Canada are as follows:—Fort Good Hope, Mackenzie river,  $-79^{\circ}$ ; Fort



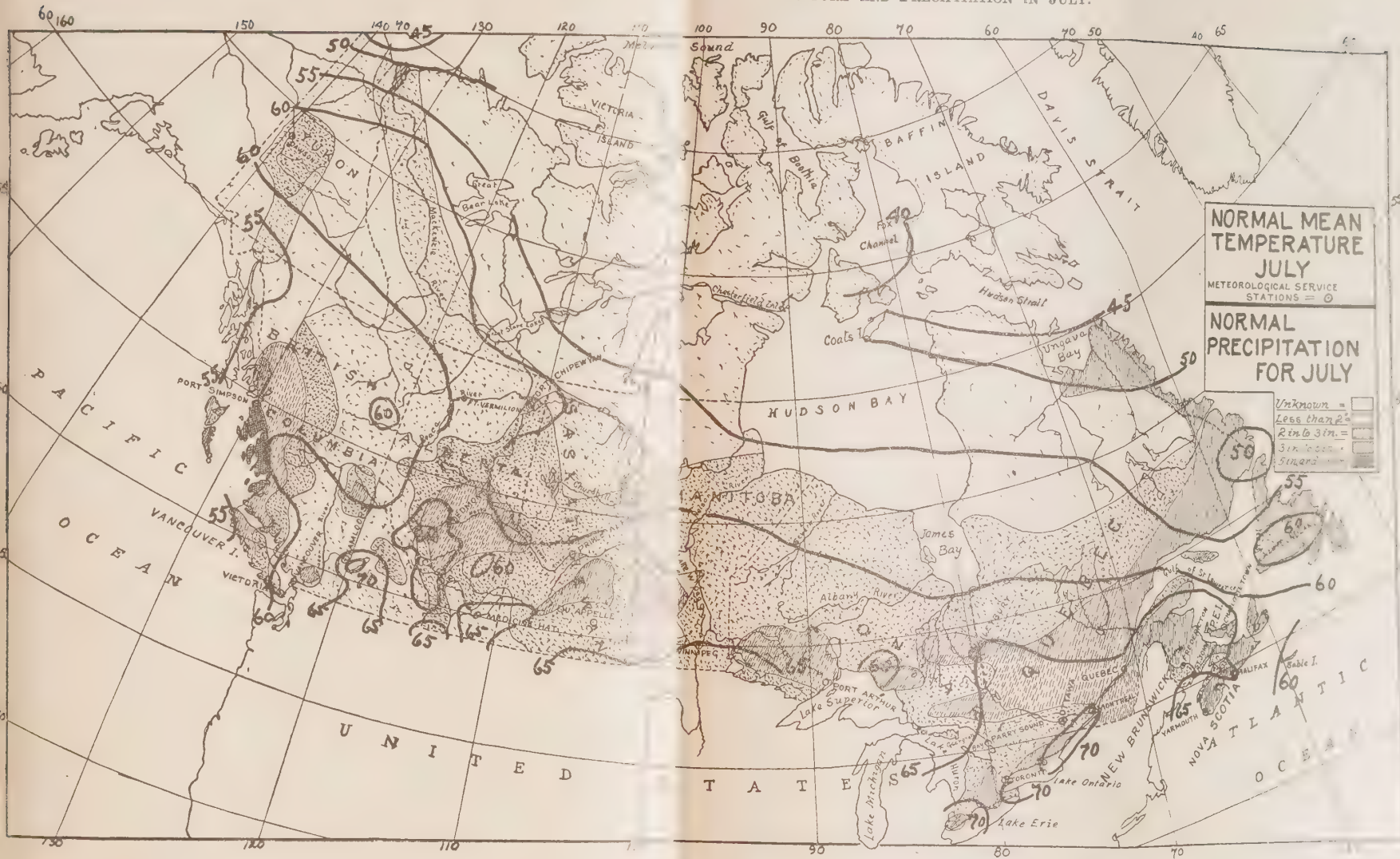
MAP OF CANADA SHOWING NORMAL MEAN TEMPERATURE AND PRECIPITATION IN JANUARY.







MAP OF CANADA SHOWING NORMAL MEAN TEMPERATURE AND PRECIPITATION IN JULY.





Vermilion  $-78^{\circ}$ ; Edmonton  $-57^{\circ}$ ; Prince Albert  $-70^{\circ}$ ; Winnipeg  $-53^{\circ}$ ; White River, Ontario,  $-60^{\circ}$ ; Toronto  $-26^{\circ}$ ; Ottawa  $-32^{\circ}$ ; Montreal  $-28^{\circ}$ ; Quebec  $-34^{\circ}$ ; Halifax  $-17^{\circ}$ .

The record of 50 years at Winnipeg presents some very interesting facts. In the first 25 years there were but seven winters with a mean temperature higher than the mean of the whole period, while in the last 25 years there were but five winters with a mean below that of the whole period. This seems to indicate that the winter climate of the West is becoming milder, but it is a significant fact that the much longer record at St. Paul, Minn., indicates that the thirties and forties of the last century were comparatively mild in the West, hence there is suspicion of a long period weather cycle.

In Ontario, as represented by Toronto, the temperature curve of 51 years shows somewhat the same characteristics as that of Winnipeg, with more winters below average in the first half than in the second. In the Toronto record going back to 1831, there is, however, confirmation of the fact indicated by St. Paul that a long period beginning in the fifties and ending about 1888, during which the majority of the winters were abnormally cold, had been preceded by a period of about 20 years during which, while some few winters were very cold, most were comparatively mild. The decade 1841-1850 had, on the average, the mildest winters in the whole period 1831-1921.

It is obvious, therefore, that it would be unwise to form any definite conclusions regarding climatic changes on a record of even fifty years, as there are manifest evidences of pulsations of a longer period.

Since the Toronto record is much the longest, it is the most instructive we possess, and the following are some of the most noticeable features regarding the winters in Ontario. In the 1840-1850 period there were eight winters above normal temperature. The next twenty years contained more winters below than above but no very wide extremes. Then followed from 1873 to 1883 a period during which the winters alternated between cold and mild, while the six consecutive winters 1883-88 were all cold. The next four winters were mild and then from 1894 to 1903 there were ten successive winters of almost average temperature. The winters of 1904 and 1905 were very cold and then followed eleven years above average, with but two exceptions. The winter of 1918 was extremely cold, 1919 very mild, 1920 very cold, and the past two winters exceptionally mild.

The general form of the temperature curves of Montreal and Halifax are very similar to those of western stations, but they do not give evidence of quite as marked a tendency towards a preponderance of milder winters in the last quarter century. At Montreal the mean temperature of the last decade was  $1^{\circ}$  below the mean of the whole period, while the mean of the first decade was  $1^{\circ}$  above. At Halifax the mean of the last decade was a fraction of a degree higher than that of the first decade.



While, as we have seen, the winters vary very considerably in severity, yet as the spring advances departures from a normal value diminish, and the summer season throughout the Dominion is subject to relatively small variations. There are differences, however, and in Alberta the summers of the eighties, exclusive of 1881, 1886 and 1889, were distinctly cooler than any term of years since then, while the summers of 1894, 1896, 1898 and 1906 were especially marked by higher temperature. In nearly all other years the mean of the season differed very little from the normal derived from the whole period.

The general character of the summers as regards temperature has been much the same in Manitoba as in the provinces farther west. In the seventies they were warm, while in the eighties they were cool, especially in 1883 and 1885. The nineties were also cool, except '90, '93 and '94, but since 1900 warm summers have predominated with marked exceptions, however, in 1904 and 1905 and again in 1915.

From Ontario eastward the year 1869 had the coolest summer in 52 years, and after that the coolest summers occurred from 1882 to 1891, exclusive of 1887, and in 1902-3-4. A decade of warm summers commenced in 1892 and then since 1905 warm summers have predominated, but 1912-15 and '17 were comparatively cool. The spell of greatest heat ever recorded in Ontario occurred in the first week of July, 1911, when temperatures above 100° were registered on several consecutive days in the peninsula of Ontario. The summer of 1921, was the warmest on record and July was the warmest month.

There is some evidence of a tendency towards a somewhat higher mean temperature in both summer and autumn months in Ontario, a tendency which is more doubtful in the other provinces. In the early days of settlement in Ontario summer frosts were not uncommon but have since become quite rare. It would appear reasonable to suppose that deforestation of the country east of the Mississippi must lead to greater insolation in the northern United States and this would affect Ontario more than the other provinces.

The dates and severity of late spring and early autumn frosts in the western provinces are not quite conclusive, but the general inference from the longer records combined with those of short period, is that there has been no appreciable change since the early days of settlement.

**Precipitation.**—Fifty years of meteorological records afford no ground for belief that the precipitation of the Dominion has changed with the gradual deforestation and the general activities of man in covering the country with a network of railways and wires carrying electrical currents. Variations of a character which suggest cycles, probably due to cosmical causes, are, however, quite apparent, but at the same time perplexing, and it may be assumed with a high degree of probability that there has been no permanent progressive change in either rainfall or snow.

The Winnipeg records and also records from a shorter term of years in the West indicate that the eighties included more dry summers

than in any subsequent corresponding period, while the Alberta records show a remarkable period of about six wet summers from 1899 to 1904 and again from 1911 to 1915.

While 1878 was the year of greatest precipitation in Ontario, and also the summer of greatest rainfall, the seventies as a whole had dry summers. In the eighties the summers of '80 and '83 and '85 were wet and others about normal, excepting '87 which was very dry. In the nineties the summers of '95, '96, '98 and '99 were particularly dry, while the other years had an ample but not excessive rainfall. Since 1900 the summers of 1907, 1911 and 1913 were exceptionally dry, while others were nearly normal. At Montreal the year immediately succeeding Confederation and 1915 were the years of least precipitation, and 1869, 1885 and 1900 were the years of greatest precipitation. The decade commencing 1870 was that of least precipitation and that commencing 1900 of greatest. Here again we have no indication of progressive change.

The records of precipitation made at Halifax since 1868 show no evidence of progressive change during the fifty-four years which have elapsed. During the first decade the average annual precipitation was 54 inches, during the second 58 inches, the third 57, the fourth 58, the fifth 54 inches. The wettest years were 1884, 1888, 1896, 1907, 1908, 1910, with total precipitation respectively as follows: 64, 67, 70, 64, 65, 68 inches. The driest years were 1868, 1879, 1889, 1894, 1905, 1914, 1916, the respective totals being 50, 48, 47, 45, 48, 48, 46 inches. In the first decade the greatest annual snowfall was 125 inches and the least 29 inches. In the second decade these figures became respectively 134 inches and 32 inches; in the third 108 and 50½ inches, in the fourth 108 and 55, and in the fifth 101 and 38. In January, 1894, 56 inches of snow fell and in October, 1896, 15 inches of rain were recorded on a total of 20 days.

In the seventies and early eighties there were many more years with heavy snowfalls in March in Ontario and Quebec than have occurred in any period of equal length since then. The result was to make the annual average snowfall for that period considerably higher than the normal, although the annual total precipitation in years with a snowy March was frequently below normal. Lack of observations for this period in the western provinces, except at Winnipeg, leaves us restricted to a consideration of the years since 1883. The most remarkable feature of the western snowfalls was the change from light to heavy snowfalls which occurred in the nineties. If we consider the decades 1885-1894, 1895-1904, 1905-1914, and form the average annual totals of snowfall for these, we find at Medicine Hat, 29 inches in the first decade, 45 inches in the second, 24 inches in the third. At Edmonton the figures are respectively, 36, 52, 39 inches; at Calgary 37, 51 and 42; at Qu'Appelle, 45, 70 and 51. At Winnipeg, however, the sequence is different, the respective decadal averages running 52, 43½, 50½. At Prince Albert the first of these decades is missing, but the second two have averages of 58½ and 48½ which sufficiently resemble the other records, as do also the figures for these two decades at Battleford, viz. 35 and 24.

## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations.

## JANUARY.

Province or District.	Temperature (° Fahr.).						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—								p.c.			
S. Vancouver I.....	37	42	33	9	54	19	10.35	+ 30	22	7.06	0° to +2°
N. Vancouver I.....	37	41	33	8	50	25	10.90	+ 5	23	3.00	0° to +3°
Lower Fraser R.....	37	41	33	8	55	17	10.80	+ 30	23	4.46	0° to +8°
Lillooet L.....	28	33	23	10	40	0	7.30	—	17	2.40	+6°
Upper Fraser R.....	16	26	7	19	50	- 30	2.00	+ 30	9	1.62	0° to +4°
Peace R.....	- 3	5	- 11	16	43	- 45	2.65	—	12	1.30	-5°
Okanagan & Similkameen Valleys.....	27	34	20	14	54	- 18	1.15	+ 40	12	0.98	+2° to +7°
W. Kootenay.....	26	32	20	12	49	- 18	4.10	+ 25	16	1.00	+2° to +5°
E. Kootenay.....	22	31	14	17	48	- 11	2.30	- 20	13	0.78	+5° to +8°
Thompson R.....	25	33	18	15	51	- 10	1.65	- 20	11	0.90	+4° to +10°
N. Columbia R.....	17	24	11	13	34	- 16	6.15	+ 20	18	1.40	+3° to +6°
N. Coast.....	25	31	20	11	42	- 12	7.40	- 15	15	2.22	+2° to +5°
Queen Charlotte I.....	34	38	30	8	45	21	6.20	—	18	1.72	-2°
Yukon—All Stations.....	- 20	- 12	- 28	16	39	- 52	0.40	- 35	6	0.15	-4° to -1°
Alberta—											
N. Saskatchewan R...	7	18	- 3	21	44	- 41	0.65	- 30	6	0.70	+2° to +8°
Red Deer R.....	10	22	- 1	23	50	- 45	0.65	- 15	4	0.60	+1° to +5°
Bow R.....	18	29	7	22	50	- 26	0.90	+ 20	3	1.40	+6° to +10°
Athabasca R.....	4	15	- 6	21	44	- 45	1.40	—	8	0.75	+7°
Peace R.....	- 2	10	- 13	23	39	- 45	0.20	—	4	0.15	+2°
Saskatchewan—											
Qu'Appelle R.....	9	19	- 1	20	41	- 34	0.45	- 30	4	0.40	+6° to +19°
S. Saskatchewan R...	15	27	- 4	23	49	- 20	0.35	- 75	4	0.50	+10° to +11°
N. Saskatchewan R...	7	17	- 2	19	43	- 37	0.50	- 25	3	0.40	+7° to +11°
Saskatchewan Forks...	5	15	- 4	19	39	- 44	0.60	- 15	4	0.40	+5° to +12°
Barrier R.....	2	12	- 7	19	27	- 34	0.85	—	5	0.40	—
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	7	17	- 2	19	36	- 33	0.65	- 25	7	0.40	+7° to +11°
Red R.....	7	17	- 3	20	39	- 40	0.70	+ 10	3	0.60	+7° to +11°
Winnipeg R.....	6	17	- 4	21	32	- 37	1.45	—	6	0.60	—
Dauphin Lake & R...	6	15	- 3	18	31	- 36	1.20	—	3	1.20	+11° to +13°
Nelson R.....	- 8	0	- 15	15	25	- 38	0.70	—	3	0.30	+7°
Ontario—											
Rainy R.....	10	22	- 2	24	40	- 42	1.15	—	5	0.80	—
Kenora.....	6	16	- 4	20	36	- 42	0.65	—	5	0.60	+10°
Thunder B.....	10	21	0	21	43	- 40	0.75	- 35	5	0.60	+7° to +10°
Algoma.....	8	20	- 4	24	47	- 43	1.35	—	9	0.65	+7°
Sudbury.....	12	23	1	22	42	- 44	1.25	—	7	2.05	—
Timiskaming.....	5	16	- 6	22	43	- 37	1.85	- 30	11	0.72	+3° to +6°
Nipissing.....	12	24	0	24	46	- 42	1.50	—	7	1.15	-2°
Manitoulin I.....	20	28	13	15	44	- 32	2.90	—	7	1.80	+5°
Upper Ottawa R.....	12	23	2	21	44	- 38	0.65	- 70	8	0.30	+3° to +5°
Upper St. Lawrence & Ottawa Rs.....	19	28	10	18	49	- 31	1.35	- 45	7	1.00	+2° to +7°
Georgian B. Cos.....	22	31	14	17	47	- 38	1.85	- 45	7	1.75	+3° to +7°
Lake Huron Cos.....	24	31	17	14	47	- 8	2.05	- 45	12	1.00	+2° to +5°
Lakes St. Clair & Erie, Niagara Pen.....	28	35	22	13	53	- 5	0.55	- 80	4	0.50	+1° to +6°
W. Central Cos.....	25	33	17	16	50	- 17	1.25	- 65	8	0.79	+5° to +8°
L. Ontario Cos.....	25	33	18	15	53	- 16	0.60	- 80	8	0.40	+1° to +6°
E. Central Cos.....	21	32	10	22	49	- 38	1.10	- 75	6	0.80	+2° to +11°
Quebec—											
Middle St. Lawrence.....	14	24	5	19	46	- 41	1.90	- 40	8	1.30	+2° to +9°
Lower St. Lawrence & Gulf.....	10	19	2	17	46	- 25	2.90	- 5	8	1.20	+2° to +3°
L. St. John.....	3	14	- 8	22	41	- 43	2.30	—	10	0.98	+6°
Upper St. Maurice.....	5	15	- 4	19	38	- 35	2.10	—	8	0.80	+5°
Northwestern Districts	6	18	- 5	23	41	- 41	1.65	- 35	7	0.60	+5°
N.B.—All Stations.....	14	25	6	21	51	- 32	2.70	- 35	8	2.00	0° to +4°
N.S.—All Stations.....	22	33	11	22	54	- 17	3.10	- 25	10	1.80	-2° to +2°
P.E.I.—All Stations.....	19	27	11	16	45	- 10	3.60	—	14	0.90	0°

## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

FEBRUARY.

Province or District.	Temperature (° Fahr.).						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I. ....	39	45	34	11	58	15	7.15	+ 25	16	5.57	-1° to +2°
N. Vancouver I. ....	40	45	35	10	52	24	4.70	—	12	2.00	+2°
Lower Fraser R. ....	40	46	35	11	64	15	9.00	+ 35	12	4.01	+1° to +7°
Lillooet L. ....	31	37	25	12	48	—	6.45	—	10	1.25	+2°
Upper Fraser R. ....	25	36	15	21	64	— 28	1.00	— 10	6	0.95	+3° to +5°
Peace R. ....	12	24	1	33	50	— 37	1.00	—	7	0.50	+4°
Okanagan & Similkameen Valleys.....	31	38	24	14	55	— 15	0.45	— 50	6	0.32	+3° to +7°
W. Kootenay.....	29	36	23	13	53	— 15	2.60	+ 15	11	1.25	+1° to +2°
E. Kootenay.....	27	37	18	19	58	— 12	2.10	+ 10	8	1.13	+7° to +8°
Thompson R. ....	30	39	21	17	60	— 7	0.70	— 30	5	0.58	+5° to +7°
N. Columbia R. ....	22	31	14	17	46	— 20	4.80	+ 30	12	1.15	+4° to +6°
N. Coast.....	30	37	24	13	54	— 8	12.50	+110	17	3.86	0° to +4°
Queen Charlotte I. ....	37	42	32	10	49	21	8.70	—	16	1.85	0°
Yukon—All Stations.....	— 9	1	— 18	19	44	— 54	0.50	— 40	5	0.30	-3° to 0°
Alberta—											
N. Saskatchewan R. ....	16	27	5	22	57	— 43	1.00	+ 60	6	0.75	+6° to +11°
Red Deer R. ....	17	29	5	24	58	— 30	0.60	—	5	0.80	+4° to +8°
Bow R. ....	22	33	12	21	62	— 25	1.10	+ 10	4	1.57	+5° to +13°
Athabasca R. ....	16	28	4	24	60	— 42	0.95	—	7	0.60	+7°
Peace R. ....	15	26	4	22	50	— 38	0.55	—	3	0.30	+8°
Saskatchewan—											
Qu'Appelle R. ....	12	32	2	20	55	— 43	0.95	+100	5	1.02	+7° to +16°
S. Saskatchewan R. ....	20	32	9	23	57	— 26	0.40	— 50	3	0.60	+0° to +14°
N. Saskatchewan R. ....	10	21	1	21	50	— 41	1.15	+195	5	1.00	+4° to +11°
Saskatchewan Forks...	10	20	0	20	47	— 45	1.25	+165	4	2.40	+9° to +12°
Manitoba—											
Qu'Appelle & Assiniboine Rs. ....	10	20	1	19	42	— 38	1.20	+ 90	7	0.80	+6° to +13°
Red R. ....	10	20	0	20	47	— 44	1.55	+ 95	5	1.00	+6° to +12°
Winnipeg R. ....	10	22	— 1	23	38	— 36	1.90	—	10	0.35	—
Dauphin Lake & R. ....	4	20	0	20	45	— 22	2.90	—	5	1.20	+11° to +12°
Lower Saskatchewan R. ....	4	15	— 7	22	38	— 28	2.15	—	7	0.80	+6°
Nelson R. ....	— 6	4	— 16	20	38	— 45	1.10	—	7	0.26	+7°
Ontario—											
Rainy R. ....	14	25	4	21	40	— 34	1.30	—	8	0.60	—
Kenora.....	11	21	1	20	40	— 35	1.65	—	9	0.70	+12°
Thunder B. ....	13	24	2	22	40	— 36	1.35	+ 45	9	0.40	+9° to +10°
Algoma.....	8	23	— 7	30	44	— 44	1.85	—	9	0.70	+7°
Sudbury.....	13	27	0	27	49	— 35	1.25	—	9	0.53	—
Timiskaming.....	6	20	— 7	27	46	— 42	1.55	— 40	11	0.50	+4° to +7°
Nipissing.....	13	27	— 1	28	49	— 33	1.40	—	8	0.60	+2°
Manitoulin I. ....	19	29	9	20	47	— 7	1.50	—	6	0.40	+5°
Upper Ottawa R. ....	13	26	0	26	49	— 24	1.25	— 35	8	0.36	+2° to +5°
Upper St. Lawrence & Ottawa R. ....	21	30	12	18	56	— 13	1.35	— 45	8	0.60	+4° to +10°
Georgian B. Cos. ....	22	31	14	17	57	— 18	1.35	— 45	7	0.60	+4° to +11°
L. Huron Cos. ....	25	32	18	14	55	— 2	1.40	— 45	10	0.50	+6° to +8°
L. St. Clair & Erie, Niagara Pen. ....	28	35	22	13	62	5	1.55	— 45	6	0.80	+3° to +8°
W. Central Cos. ....	25	33	18	15	60	1	2.00	— 25	9	0.97	+4° to +8°
L. Ontario Cos. ....	26	33	19	14	57	0	1.35	— 50	8	0.70	+4° to +9°
E. Central Cos. ....	22	32	12	20	53	— 15	1.40	— 45	8	0.60	+6° to +10°
Quebec—											
Middle St. Lawrence..	14	26	3	23	53	— 29	1.30	— 50	8	0.65	+2° to +9°
Lower St. Lawrence & Gulf.....	10	21	— 1	22	40	— 28	1.00	— 55	5	1.20	-4° to +2°
Lake St. John.....	1	16	— 13	29	45	— 37	1.05	—	6	0.50	-1°
Upper St. Maurice....	6	19	— 7	26	46	— 32	0.90	—	5	0.71	+4°
Northwestern Districts	7	20	— 6	26	48	— 41	0.95	— 50	6	0.45	-1° to +6°
N.S.—All Stations.....	14	28	1	27	48	— 35	2.30	— 25	6	2.00	-2° to +2°
N.S.—All Stations.....	19	29	10	19	45	— 8	3.90	+ 5	8	2.20	-7° to +1°
P.E.I.—All Stations.....	14	23	15	18	40	— 10	2.95	—	8	1.30	-4°



# 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

MARCH.

Province or District.	Temperature (° Fahr.).						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	41	48	34	14	71	21	2.90	— 35	13	2.10	—1° to +1°
N. Vancouver I.....	41	48	35	13	60	25	3.05	— 60	15	1.35	—1° to +2°
Lower Fraser R.....	42	49	36	13	66	19	3.75	— 70	15	1.02	—1° to +2°
Lillooet L.....	36	46	26	20	60	10	1.95	—	8	0.80	—1°
Upper Fraser R.....	28	39	18	21	66	22	0.75	+ 10	5	0.50	—5° to +2°
Peace R.....	15	28	3	25	47	33	1.55	—	4	1.00	—6°
Okanagan & Similkameen Valleys.....	38	47	29	18	66	5	0.90	+ 55	8	0.58	—1° to +3°
W. Kootenay.....	35	44	27	17	63	— 1	2.55	+ 50	11	1.17	0° to +2°
E. Kootenay.....	32	42	23	19	63	— 11	2.00	+ 45	10	1.20	0° to +2°
Thompson R.....	37	47	28	19	68	3	1.05	+ 5	7	0.88	0° to +4°
N. Columbia R.....	28	38	19	19	49	— 5	3.60	+ 10	10	1.50	0° to +2°
N. Coast.....	34	42	27	15	56	— 6	3.85	— 50	11	2.20	—2° to +1°
Queen Charlotte I.....	37	42	32	10	49	19	2.70	—	12	0.80	—2°
Yukon—All Stations.....	5	18	— 7	25	44	— 37	0.55	— 15	6	0.30	—4° to —3°
Alberta—											
N. Saskatchewan R....	17	29	6	23	58	— 38	1.00	+ 60	7	0.70	—7° to —2°
Red Deer R.....	18	30	6	24	62	— 44	1.50	+200	8	0.70	—9° to —4°
Bow R.....	23	34	13	21	61	— 40	2.45	+140	10	1.70	—4° to +2°
Athabasca R.....	16	30	3	27	60	— 38	0.95	—	7	1.00	—8°
Peace R.....	13	26	0	26	48	— 46	0.90	—	5	0.40	—13° to —4°
Saskatchewan—											
Qu'Appelle R.....	18	29	7	22	59	— 30	0.90	+100	10	0.90	—7° to +11°
S. Saskatchewan R....	22	33	11	22	57	— 30	1.00	+ 50	8	1.20	+2° to +6°
N. Saskatchewan R....	14	25	4	21	53	— 40	1.10	+ 70	6	0.60	—5° to +2°
Saskatchewan Forks...	11	23	— 1	24	48	— 44	1.85	+230	7	1.00	—2° to —1°
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	15	25	6	19	53	— 24	0.90	+ 70	7	0.80	—2° to +2°
Red R.....	16	27	6	21	51	— 28	0.80	— 20	6	0.50	—3° to +2°
Winnipeg R.....	13	26	0	26	48	— 29	1.05	—	7	0.30	—
Dauphin Lake & R....	15	26	5	21	47	— 19	3.60	—	8	0.80	—1°
Lower Saskatchewan R	7	19	— 5	24	43	— 31	0.55	—	5	0.20	—3°
Nelson R.....	— 4	7	— 15	22	45	— 44	1.20	—	10	0.25	—4°
Ontario—											
Rainy R.....	19	30	9	21	55	— 22	1.20	—	7	0.45	—
Kenora.....	16	28	5	23	51	— 30	1.25	—	6	0.60	—3°
Thunder B.....	18	30	7	23	55	— 23	2.05	+ 80	10	0.88	+2° to +7°
Algoma.....	18	30	7	23	61	— 30	2.05	—	9	1.00	+4°
Sudbury.....	25	35	16	19	58	— 26	3.20	—	15	1.05	—
Timiskaming.....	17	30	5	25	60	— 26	2.50	+ 20	15	0.79	+1° to +4°
Nipissing.....	28	38	18	20	62	— 17	4.70	—	15	2.10	+6°
Manitoulin I.....	30	37	23	14	57	— 1	3.65	—	12	1.34	+5°
Upper Ottawa R.....	26	39	14	25	64	— 12	2.55	+ 35	12	1.00	+4° to +5°
Upper St. Lawrence & Lower Ottawa Rs...	34	43	25	18	76	— 4	3.85	+ 60	14	1.45	+7° to +14°
Georgian B. Cos.....	34	43	25	18	70	— 5	4.65	+ 90	13	2.28	+8° to +12°
Lake Huron Cos.....	36	46	27	19	70	— 0	4.05	+ 45	16	1.24	+9° to +11°
Lakes St. Clair & Erie, Niagara Pen...	40	49	31	18	85	9	3.35	+ 30	13	1.44	+7° to +13°
W. Central Cos.....	37	47	28	19	72	2	3.60	+ 65	15	1.34	+9° to +13°
Lake Ontario Cos.....	37	46	29	17	71	2	2.45	— 5	16	0.52	+8° to +10°
East Central Cos.....	34	43	25	18	69	— 6	3.75	+ 50	14	1.11	+7° to +11°
Quebec—											
Middle St. Lawrence...	31	41	21	20	70	— 12	3.70	+30	13	1.50	+6° to +12°
Lower St. Lawrence & Gulf.....	23	33	13	20	61	— 18	3.25	— 15	11	1.60	—2° to +4°
L. St. John.....	19	31	8	23	57	— 26	3.10	—	13	1.60	+3°
Upper St. Maurice...	24	35	14	21	57	— 20	3.20	—	11	0.68	+9°
Northwestern Districts	21	32	10	22	62	— 32	2.75	— 5	11	1.58	+4° to +7°
N.B.—All Stations.....	31	41	21	20	66	— 19	3.25	— 5	11	2.21	+3° to +8°
N. S.—All Stations.....	34	43	26	17	71	3	4.15	— 5	12	2.80	0° to +7°
P.E.I.—All Stations....	32	40	25	15	56	12	3.90	—	17	0.63	+5°

## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

APRIL.

Province or District.	Temperature (°Fahr.).						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I. ....	45	54	36	18	74	23	2.95	+ 5	15	2.94	-3° to +1°
N. Vancouver I. ....	44	53	35	18	63	28	6.90	+ 5	13	2.30	0°
Lower Fraser R. ....	46	55	38	17	76	27	4.60	+ 5	17	1.72	-3° to 0°
Lillooet L. ....	44	56	32	24	70	17	1.00	—	7	0.37	-1°
Upper Fraser R. ....	40	52	28	24	74	9	0.85	+ 30	6	1.52	-3° to +3°
Peace R. ....	37	51	23	28	65	13	0.45	—	2	0.33	-4°
Okanagan & Similkameen Valleys. ....	45	56	34	22	75	16	1.25	+130	8	0.72	-3° to -1°
W. Kootenay. ....	43	54	32	22	82	15	1.85	+ 20	10	1.50	-4° to 0°
E. Kootenay. ....	42	54	31	23	71	18	1.20	- 15	9	1.29	-1° to 0°
Thompson R. ....	45	57	32	25	75	11	0.75	- 15	6	0.50	-3° to -1°
N. Columbia R. ....	38	49	27	22	69	12	2.10	+ 25	8	0.80	-1° to 0°
N. Coast. ....	42	51	33	18	65	21	3.85	- 40	13	1.89	-2° to -1°
Queen Charlotte I. ....	41	47	35	12	57	29	3.90	—	17	1.15	-3°
Yukon—All Stations. ....	30	42	18	24	55	- 6	0.25	- 50	4	0.12	0° to +2°
Alberta—											
N. Saskatchewan R. ....	38	50	26	24	74	- 4	1.25	+ 60	6	2.03	-3° to +1°
Red Deer R. ....	37	49	26	23	67	- 1	1.50	+130	7	1.10	-2° to 0°
Bow R. ....	40	52	29	23	74	- 1	1.60	+ 70	7	1.90	-3° to +3°
Athabasca R. ....	39	53	25	28	78	5	0.75	—	4	0.65	+1°
Peace R. ....	42	54	30	24	76	- 8	0.55	+ 70	2	0.96	+9°
Saskatchewan—											
Qu'Appelle R. ....	35	46	25	21	75	- 5	1.60	+130	6	1.60	-8° to +1°
S. Saskatchewan R. ....	39	51	28	23	69	- 2	1.35	+ 75	7	0.80	-3°
N. Saskatchewan R. ....	35	45	26	19	68	- 6	2.45	+370	7	1.60	-5° to -3°
Saskatchewan Forks. ....	33	43	24	19	64	- 4	2.20	+290	10	0.70	-7° to -2°
Barrier R. ....	31	42	22	20	61	0	2.25	—	9	0.40	—
Manitoba—											
Qu'Appelle & Assiniboine Rs. ....	36	46	26	20	73	0	1.25	+ 10	6	0.83	-3° to -1°
Red R. ....	38	48	28	20	76	10	1.10	+ 5	6	0.72	0° to -1°
Winnipeg R. ....	37	54	21	33	65	14	2.05	—	7	0.80	—
Dauphin Lake & R. ....	34	43	26	17	71	3	0.85	- 20	3	0.80	-2° to +4°
Lower Saskatchewan R. ....	30	39	21	18	54	3	1.65	—	7	0.50	-5°
Nelson R. ....	20	30	11	19	53	-22	2.25	—	6	0.50	-9°
Ontario—											
Rainy R. ....	41	54	29	25	78	8	1.80	—	6	1.10	—
Kenora. ....	36	46	27	19	77	2	2.05	—	6	1.00	+2°
Thunder B. ....	37	48	26	22	84	- 2	2.60	+ 80	8	1.29	+2° to +7°
Algoma. ....	37	51	24	27	83	- 9	2.25	—	7	1.50	+4°
Sudbury. ....	42	55	29	26	85	- 4	3.40	—	10	1.60	—
Timiskaming. ....	36	48	24	24	87	-10	3.55	+ 90	13	1.38	+4° to +5°
Nipissing. ....	43	57	29	28	88	9	3.75	—	8	3.10	+5°
Manitoulin I. ....	44	54	34	20	74	9	3.00	—	8	1.40	+6°
Upper Ottawa R. ....	43	58	28	30	89	5	2.20	+ 30	10	0.70	+1° to +6°
Upper St. Lawrence & Lower Ottawa Rs. ....	47	58	36	22	87	12	2.60	+ 25	9	1.50	+4° to +10°
Georgian B. Cos. ....	47	58	36	22	89	13	3.10	+ 40	9	1.68	+6° to +9°
Lake Huron Cos. ....	48	59	38	21	82	11	3.55	+ 60	11	0.97	+5° to +8°
Lakes St. Clair & Erie, Niagara Pen. ....	50	60	40	20	86	20	3.75	+ 40	10	2.01	+2° to +9°
W. Central Cos. ....	49	60	38	22	84	17	4.55	+ 80	10	1.65	+6° to +9°
Lake Ontario Cos. ....	48	57	39	18	80	15	4.50	+105	10	1.30	+5° to +8°
E. Central Cos. ....	48	59	37	22	85	10	2.70	+ 45	9	1.50	+6° to +9°
Quebec—											
Middle St. Lawrence. ....	44	55	33	22	83	5	2.10	- 5	9	1.11	+4° to +8°
Lower St. Lawrence & Gulf. ....	34	43	25	18	85	- 1	1.45	- 45	7	1.18	0° to +1°
Lake St. John. ....	35	47	23	24	85	- 4	2.35	—	9	1.27	+1°
Upper St. Maurice. ....	37	48	26	22	84	0	2.25	—	8	0.94	+8°
Northwestern Districts	37	49	26	23	87	- 3	2.55	+ 30	9	1.20	+3° to +5°
N.B.—All Stations. ....	42	53	32	21	86	3	3.05	+ 25	9	1.50	+2° to +5°
N.S.—All Stations. ....	42	51	34	17	81	4	4.05	- 15	11	2.80	+2° to +5°
N.E.I.—All Stations. ....	40	48	33	15	74	15	3.15	—	13	0.75	+2°

# 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

MAY.

Province or District.	Temperature (°Fabr.).						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—								p.c.			
S. Vancouver I.....	52	62	43	19	89	30	1.75	-25	8	1.23	-2° to 0°
N. Vancouver I.....	52	62	42	20	77	32	2.25	-70	10	1.43	-1° to +1°
Lower Fraser R.....	54	64	45	19	84	33	2.65	-30	10	0.95	-2° to +1°
Lillooet L.....	54	70	39	31	84	28	1.15	—	4	0.65	+1°
Upper Fraser R.....	48	62	35	27	90	20	1.30	+25	7	0.66	-2° to +1°
Peace R.....	43	56	30	26	75	19	3.60	—	9	1.00	-6°
Okanagan & Similkameen Valleys.....	56	70	43	27	90	25	0.95	-20	7	0.72	-1° to +2°
W. Kootenay.....	54	69	40	29	87	24	1.05	-45	7	1.11	+1° to +3°
E. Kootenay.....	51	66	36	30	85	24	0.75	-50	6	0.42	0° to +2°
Thompson R.....	56	71	41	30	90	25	0.95	-25	6	0.63	+1° to +2°
N. Columbia R.....	48	63	33	30	77	26	1.20	-5	4	0.52	-1° to +2°
N. Coast.....	47	57	37	20	77	27	2.50	-40	9	2.07	-2° to +2°
Queen Charlotte I.....	45	52	38	14	67	28	2.65	—	16	0.79	-4°
Yukon—All Stations.....	44	56	33	23	73	19	0.80	+45	9	0.35	-1°
Alberta—											
N. Saskatchewan R....	49	63	36	27	88	18	1.70	-25	7	2.16	-1° to +2°
Red Deer R.....	48	61	35	26	86	18	1.35	-50	7	1.13	0° to +1°
Bow R.....	49	64	35	29	89	11	1.50	-50	8	1.29	-2° to +2°
Athabasca R.....	48	61	36	25	85	22	2.20	—	8	1.98	-1°
Peace R.....	50	64	37	27	85	17	1.75	+15	5	1.27	-3° to +2°
Saskatchewan—											
Qu'Appelle R.....	51	63	40	23	85	5	2.35	+15	10	1.52	+1° to +5°
S. Saskatchewan R....	50	61	39	22	88	18	1.90	+10	8	1.48	0° to +2°
N. Saskatchewan R....	50	62	39	23	82	11	1.90	+40	9	1.65	0° to +2°
Saskatchewan Forks...	52	64	41	23	82	20	2.40	+65	10	0.99	+1° to +3°
Lower Saskatchewan R	49	60	39	21	78	26	1.90	—	8	0.90	+1°
Barrier R.....	49	60	39	21	77	10	2.75	—	10	0.65	—
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	53	67	40	27	87	10	2.45	+40	7	1.90	0° to +6°
Red R.....	54	68	41	27	92	17	1.80	—	7	1.00	+2° to +4°
Winnipeg R.....	51	63	39	24	83	23	2.05	—	5	0.90	+3° to +4°
Dauphin Lake & R....	49	62	36	26	86	14	2.05	-10	6	1.40	+2°
Lower Saskatchewan R	50	60	40	20	78	23	0.40	—	4	0.28	0°
Nelson R.....	38	48	28	20	76	-8	0.60	—	6	0.33	—
Ontario—											
Rainy R.....	53	66	40	26	89	20	1.90	—	6	0.90	+5°
Kenora.....	51	63	40	23	86	19	1.85	—	5	0.70	+2° to +4°
Thunder B.....	50	63	38	25	89	18	3.25	+30	8	1.13	+3°
Algoma.....	49	64	34	30	92	5	3.30	—	9	1.26	—
Sudbury.....	52	66	39	27	89	10	1.50	—	8	1.60	+4° to +7°
Timiskaming.....	51	62	40	22	91	23	1.95	-40	10	1.01	+3°
Nipissing.....	54	69	40	29	93	20	1.70	—	6	1.10	+5°
Manitoulin I.....	54	64	45	19	83	31	1.55	—	5	1.37	-1° to +3°
Upper Ottawa R.....	53	70	36	34	94	18	1.20	-60	6	0.63	—
Upper St. Lawrence & Lower Ottawa Rs...	58	70	46	24	95	28	1.95	-35	6	2.03	+2° to +7°
Georgian B. Cos.....	56	67	45	22	93	24	1.75	-55	5	1.72	+4° to +5°
L. Huron Cos.....	58	69	48	21	88	27	2.30	-40	6	3.08	+3° to +4°
L. St. Clair & Erie, Niagara Pen.....	58	69	48	21	93	29	2.20	-25	6	1.87	0° to +5°
W. Central Cos.....	57	69	46	23	91	28	2.60	+10	6	2.34	+2° to +6°
L. Ontario Cos.....	57	67	47	20	93	29	1.85	-35	8	1.35	+2° to +5°
E. Central Cos.....	58	70	46	24	92	25	1.50	-50	7	0.89	+3° to +4°
Quebec—											
Middle St. Lawrence..	56	69	43	26	90	20	0.85	-75	5	1.20	+3° to +6°
Lower St. Lawrence & Gulf.....	48	58	38	20	87	21	1.60	-35	7	2.10	0° to +6°
Lake St. John.....	53	66	40	26	87	19	2.70	—	7	0.92	+6°
Upper St. Maurice....	52	67	38	29	90	16	1.45	—	5	1.14	+7°
Northwestern Districts	50	62	38	24	90	6	1.10	-45	6	0.68	+4° to +6°
N.B.—All Stations.....	52	66	39	27	89	18	1.40	-40	6	1.00	+1° to +3°
N.S.—All Stations.....	49	60	39	21	86	21	1.95	-35	8	1.75	0° to +2°
P.E.I.—All Stations...	50	60	41	19	80	29	1.75	—	12	0.44	+2°

## 1. Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

JUNE.

Province or District.	Temperature (°Fahr.).						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	57	63	52	11	84	36	3.00	+ 80	15	2.46	-2° to +2°
N. Vancouver I.....	56	63	48	15	76	41	5.15	+ 40	19	2.23	0° to +2°
Lower Fraser R.....	59	67	52	15	81	39	4.70	+ 45	17	1.63	0° to +2°
Lillooet L.....	60	74	47	27	86	37	1.75	—	7	0.53	—
Upper Fraser R.....	55	69	41	28	89	24	1.60	—	9	0.77	-1° to +1°
Peace R.....	53	67	40	27	73	23	3.35	—	11	0.60	-1°
Okanagan & Similkameen Valleys.....	63	76	51	25	90	33	1.75	+ 10	10	1.21	0° to +2°
W. Kootenay.....	60	73	48	25	93	34	2.45	+ 20	13	1.50	0° to +2°
E. Kootenay.....	59	73	45	28	91	32	1.60	- 40	11	1.38	+1° to +4°
Thompson R.....	62	76	49	27	89	29	1.40	- 10	9	0.95	+1° to +3°
N. Columbia R.....	57	72	42	30	85	35	3.05	+ 30	14	0.76	+2° to +4°
N. Coast.....	56	67	45	22	80	34	3.70	- 40	14	1.76	-1° to +2°
Queen Charlotte I.....	51	56	46	10	67	38	3.30	—	14	0.90	-3°
Yukon—All Stations.....	54	69	40	29	83	3	1.20	+ 5	8	0.53	+1° to +2°
Alberta—											
Saskatchewan R.....	60	74	46	28	93	24	2.70	- 35	10	2.10	+3° to +8°
Red Deer R.....	59	74	45	29	92	29	1.45	- 60	9	0.85	+2° to +6°
Bow R.....	61	76	47	29	99	29	1.00	- 65	5	1.15	0° to +7°
Athabasca R.....	57	72	43	29	86	22	1.95	- 18	9	0.95	+3°
Peace R.....	56	71	42	29	84	18	2.00	+ 5	8	1.02	-4° to +2°
Saskatchewan—											
Qu'Appelle R.....	64	75	53	22	96	25	5.00	+ 65	10	3.75	+4° to +10°
S. Saskatchewan R.....	64	78	50	28	95	30	1.95	- 30	8	1.70	+6° to +7°
N. Saskatchewan R.....	63	76	50	26	89	25	2.10	- 30	8	3.80	+4° to +7°
Saskatchewan Forks.....	64	76	53	23	89	24	3.00	+ 20	10	2.42	+6° to +7°
Lower Saskatchewan R	62	74	51	23	84	27	2.70	—	11	1.68	+5°
Barrier R.....	62	72	53	19	83	27	7.40	—	11	1.89	—
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	66	77	55	22	100	27	2.65	- 10	9	1.82	+4° to +7°
Red R.....	67	78	56	22	96	26	2.00	- 35	9	1.32	+5° to +6°
Winnipeg R.....	65	76	54	22	95	32	3.00	—	8	2.15	—
Dunlop Lake & R.....	64	76	53	23	96	28	2.80	- 15	8	1.43	+2° to +7°
Lower Saskatchewan R	69	76	63	13	85	42	0.20	—	3	0.14	+10°
Nelson R.....	56	66	46	20	88	28	3.30	—	12	1.57	+6°
Ontario—											
Rainy R.....	67	69	55	24	102	28	1.50	—	5	0.79	—
Kenora.....	65	75	55	20	95	27	1.80	—	6	1.32	+6°
Thunder B.....	63	76	51	25	98	24	1.60	- 25	7	1.18	0° to +6°
Algoma.....	61	77	46	31	94	14	1.60	—	6	1.95	+3°
Sudbury.....	63	78	49	29	94	21	1.50	—	5	2.22	—
Timiskaming.....	63	76	51	25	95	20	1.20	- 50	8	1.02	+2° to +4°
Nipissing.....	65	80	50	30	99	26	2.10	—	4	1.41	+3°
Manitowlin I.....	63	75	52	23	92	36	0.80	—	4	0.59	+4°
Upper Ottawa R.....	—	—	—	—	93	—	1.55	- 50	5	0.66	—
Upper St. Lawrence & Lower Ottawa Rs....	66	79	53	26	98	34	1.90	- 25	5	1.70	+1° to +4°
Georgian B. Cos.....	65	77	53	24	102	31	2.40	- 35	5	2.37	+2° to +8°
L. Huron Cos.....	63	75	52	23	89	30	3.05	+ 15	6	2.44	+2° to +4°
L. St. Clair & Erie, Niagara Pen.....	68	79	57	22	98	37	1.95	- 35	5	2.92	-1° to +7°
W. Central Cos.....	66	79	54	25	94	33	2.30	- 25	7	2.10	+1° to +4°
L. Ontario Cos.....	66	78	54	24	93	38	2.30	- 20	7	1.61	0° to +5°
E. Central Cos.....	65	79	51	28	102	30	2.75	- 10	7	1.50	0° to +3°
Quebec—											
Middle St. Lawrence... Lower St. Lawrence & Gulf.....	63	76	51	25	103	27	1.90	- 55	7	1.18	+2° to +4°
L. St. John.....	54	65	44	21	92	26	1.70	- 40	6	3.00	-4° to +1°
Upper St. Maurice.....	59	72	46	26	90	25	2.20	—	9	1.12	+3°
Northwestern Districts	59	74	45	29	92	22	1.75	—	6	1.03	+5°
N.B.—All Stations.....	61	75	47	28	98	28	1.75	- 50	7	0.82	+1° to +7°
N.S.—All Stations.....	57	69	45	24	91	22	1.30	- 55	9	0.83	-6° to +1°
P.E.I.—All Stations.....	56	66	46	20	85	28	1.75	- 40	8	1.51	-5° to +2°
	58	67	49	18	81	37	1.10	—	10	0.32	0°



## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

JULY.

Province or District.	Temperature (°Fahr.)						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—								p.c.			
S. Vancouver I.....	60	70	50	20	92	38	0.20	- 60	3	0.77	-2° to +1°
N. Vancouver I.....	58	66	50	16	81	41	0.90	-45	7	0.59	-2° to -1°
Lower Fraser R.....	62	72	52	20	84	41	0.65	-55	4	0.94	-2° to 0°
Lillooet L.....	62	79	45	34	90	30	0.15	—	2	0.11	—
Upper Fraser R.....	57	72	42	30	95	25	1.20	- 20	7	1.00	-4° to 0°
Peace R.....	58	72	44	28	81	33	2.15	—	8	1.50	-1°
Okanagan & Similkameen Valleys.....	67	82	53	29	97	32	0.25	- 80	2	0.55	-2° to +2°
W. Kootenay.....	65	82	49	33	98	33	0.30	- 80	3	0.40	-2° to +1°
E. Kootenay.....	63	81	46	35	98	35	1.15	- 55	5	1.91	+2° to +3°
Thompson R.....	65	81	49	32	95	34	0.40	- 80	3	0.43	-1° to 0°
N. Columbia R.....	59	74	44	30	88	36	1.50	- 20	7	0.61	0° to +1°
N. Coast.....	57	66	48	18	83	39	2.95	- 45	10	2.99	-4° to +1°
Queen Charlotte I.....	53	58	48	10	63	43	1.20	—	11	0.48	-5°
Yukon—All Stations.....	58	71	46	25	86	33	1.20	- 10	13	0.34	-1° to +1°
Alberta—											
N. Saskatchewan R....	60	74	47	27	99	24	3.30	+ 15	17	3.24	0° to +2°
Red Deer R.....	62	77	48	29	104	30	2.75	- 15	12	1.44	0° to +3°
Bow R.....	64	79	49	30	105	30	2.35	+ 20	8	2.50	-4° to +3°
Athabasca R.....	58	72	45	27	102	28	3.45	—	14	1.05	—
Pence R.....	60	74	46	28	92	34	2.55	+ 80	10	2.20	-1° to 0°
Saskatchewan—											
Qu'Appelle R.....	66	79	53	26	100	29	3.75	+ 45	10	2.02	+1° to +6°
S. Saskatchewan R....	65	80	51	29	102	34	2.60	+ 25	10	0.95	+1° to +3°
N. Saskatchewan R....	64	78	50	28	103	35	2.45	- 15	11	0.82	+1° to +3°
Saskatchewan Forks....	64	77	51	26	96	36	3.60	+ 30	14	1.68	+2° to +3°
L. Saskatchewan R....	63	75	51	24	85	40	3.10	—	17	1.04	+2°
Barrier R.....	63	75	52	23	86	42	2.55	—	5	1.58	—
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	69	83	55	28	105	35	1.45	- 35	7	4.56	+1° to +11°
Rod R.....	69	81	57	24	99	35	5.15	+ 95	9	4.35	+4° to +5°
Winnipeg R.....	68	80	56	24	90	45	3.45	—	10	0.98	—
Dauphin L. & R.....	68	81	55	26	94	44	3.35	+ 10	7	1.49	+6°
Lower Saskatchewan R	69	75	63	12	82	55	1.30	—	9	0.30	+5°
Nelson R.....	63	74	52	22	88	35	1.30	—	10	0.63	+3°
Ontario—											
Rainy R.....	69	83	56	27	99	26	4.55	—	9	1.47	+3°
Kenora.....	68	79	58	21	99	39	6.65	—	11	3.55	+6° to +8°
Thunder B.....	69	81	57	24	100	35	5.05	+ 35	13	2.01	+6° to +8°
Algoma.....	69	84	55	29	99	26	4.65	—	11	2.40	+8°
Sudbury.....	71	85	57	28	101	34	2.70	—	8	1.97	—
Temiskaming.....	72	85	60	25	102	39	3.30	- 5	12	1.31	+7°
Nipissing.....	72	87	57	30	103	32	2.65	—	7	1.25	+7°
Manitowlin I.....	74	85	64	21	96	52	2.75	—	6	1.00	+10°
Upper St. Lawrence & Lower Ottawa R....	72	86	58	28	104	45	3.50	+ 10	12	1.13	+4° to +8°
Georgian B. Cos.....	76	88	65	23	102	45	2.85	- 10	7	4.18	+5° to +10°
L. Huron Cos.....	75	87	64	23	100	45	3.20	- 5	7	2.95	+7° to +11°
L. St. Clair & Erie, Niagara Pen.....	74	85	64	21	97	45	6.10	+105	8	2.69	+6° to +8°
W. Central Cos.....	77	87	67	20	101	47	2.55	- 10	7	2.17	+4° to +8°
L. Ontario Cos.....	75	86	64	22	101	49	5.45	+ 80	9	4.05	+5° to +8°
E. Central Cos.....	76	86	66	20	100	51	2.90	- 10	8	2.54	+4° to +7°
Quebec—	74	87	61	26	100	46	4.35	+ 50	7	2.25	+4° to +8°
Middle St. Lawrence... Lower St. Lawrence & Gulf.....	73	85	62	23	101	40	3.85	—	10	2.03	+6° to +8°
L. St. John.....	65	76	54	22	96	26	2.20	- 35	6	1.75	-1° to +5°
Upper St. Maurice.....	69	80	58	22	96	33	5.15	—	12	2.12	+6°
Northwestern Districts	66	83	49	34	96	25	5.50	—	10	1.80	—
N.B.—All Stations.....	71	84	58	26	103	34	2.95	- 5	10	1.42	+8°
N.S.—All Stations.....	70	83	58	25	97	32	1.90	- 40	5	1.52	+1° to +5°
P.E.I.—All Stations.....	66	76	56	20	95	32	1.95	- 40	6	1.82	0° to +5°
	69	79	60	19	90	46	0.75	—	5	0.31	+3°

## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

AUGUST.

Province or District.	Temperature (°Fahr.)						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	60	69	51	18	98	39	2.25	p.c. +100	9	4.46	—3° to +1°
N. Vancouver I.....	59	67	52	15	83	45	5.25	+70	14	1.71	—1°
Lower Fraser R.....	62	73	52	21	90	43	3.15	+40	10	2.50	—2° to +1°
Lillooet L.....	62	76	48	28	93	34	2.35	—	6	0.90	0°
Upper Fraser R.....	57	70	44	26	96	29	2.00	+10	10	0.86	—3° to +2°
Peace R.....	55	68	42	26	86	32	2.25	—	10	1.22	—4°
Okanagan & Similkameen Valleys.....	66	80	52	27	97	33	0.80	—25	6	0.56	—1° to +2°
W. Kootenay.....	64	81	48	33	100	31	0.80	—45	5	1.29	—2° to +3°
E. Kootenay.....	61	79	44	35	95	28	0.55	—55	5	0.47	+1° to +2°
Thompson R.....	64	79	49	30	96	32	0.80	—25	7	0.37	0° to +2°
N. Columbia R.....	58	72	44	28	86	34	2.45	+15	9	0.90	+1°
N. Coast.....	58	66	50	16	87	39	5.80	—5	15	2.43	—1° to 0°
Queen Charlotte I.....	55	60	50	10	68	46	2.50	—	14	0.86	—4°
Yukon—All Stations.....	55	68	42	26	88	29	0.75	—20	9	0.42	+1° to +2°
Alberta—											
N. Saskatchewan R....	57	71	43	28	94	28	1.70	—35	9	0.90	—2° to +2°
Red Deer R.....	58	74	43	31	95	26	1.25	—50	7	1.01	—1° to +3°
Bow R.....	61	77	45	32	105	22	1.10	—35	5	1.80	—2° to +3°
Athabasca R.....	56	69	43	26	96	30	1.75	—	9	1.40	—1°
Peace R.....	57	70	45	25	82	32	2.90	+130	9	3.15	—3° to +1°
Saskatchewan—											
Qu'Appelle R.....	62	76	48	28	98	31	1.85	—5	7	2.57	—1° to +4°
S. Saskatchewan R....	63	80	47	33	98	29	0.85	—30	4	1.22	+1° to +3°
N. Saskatchewan R....	61	78	45	33	96	29	1.00	—50	5	0.80	—1° to +2°
Saskatchewan Forks...	60	74	46	28	95	33	0.80	—55	6	0.49	0° to +2°
Lower Saskatchewan R.	60	72	48	24	83	36	0.95	—	9	0.33	—2°
Barrier R.....	59	72	47	25	86	32	1.00	—	9	0.33	—
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	64	78	50	28	99	29	2.55	+20	9	1.55	+1° to +4°
Red R.....	63	76	50	26	95	29	2.45	—	9	1.50	—1° to +2°
Winnipeg R.....	61	74	49	25	86	37	2.35	—	11	1.00	—
Dauphin Lake & R....	62	75	49	26	88	39	4.05	+85	8	1.97	+2°
Lower Saskatchewan R.	63	71	55	16	82	42	1.20	—	4	0.57	+2°
Nelson R.....	55	65	45	20	81	33	3.15	—	8	1.04	—1°
Ontario—											
Rainy R.....	63	75	52	23	88	34	2.15	—	7	1.19	—
Kenora.....	61	72	51	21	87	34	3.85	—	7	2.04	—1°
Thunder B.....	59	72	47	25	92	28	1.45	—55	8	1.00	—3° to +3°
Algoma.....	58	71	45	26	87	20	2.80	—	9	1.60	—
Sudbury.....	59	71	47	24	85	20	2.15	—	9	0.89	—
Timiskaming.....	60	71	50	21	89	32	3.10	+15	10	2.43	—
Nipissing.....	57	72	43	29	88	29	2.40	—	6	1.06	—1°
Manitoulin I.....	64	72	56	16	86	44	3.70	—	8	1.58	+2°
Upper Ottawa R.....	62	72	50	24	92	34	3.20	+5	9	1.45	—2° to +1°
Upper St. Lawrence & Lower Ottawa Rs....	66	77	55	22	89	37	2.35	—25	6	2.49	—3° to +1°
Georgian B. Cos.....	64	75	54	21	87	35	1.95	—40	7	1.16	—1° to +2°
L. Huron Cos.....	66	76	47	19	86	39	2.30	—10	7	1.09	—1° to +2°
L. St. Clair & Erie, Niagara Pen.....	68	79	58	21	92	40	3.40	+30	8	2.25	—4° to +1°
W. Central Cos.....	65	76	54	22	92	40	2.40	—10	8	2.71	—2° to +2°
L. Ontario Cos.....	66	76	56	20	91	42	1.80	—25	6	1.64	—1° to +1°
E. Central Cos.....	63	75	51	24	87	35	2.70	+5	7	1.48	—3° to —1°
Quebec—											
Middle St. Lawrence..	63	75	52	23	101	25	3.15	—5	7	1.77	—2° to +2°
Lower St. Lawrence & Gulf.....	56	65	47	18	89	31	3.15	—30	9	1.70	—6° to —1°
L. St. John.....	60	70	50	20	84	38	3.60	—	14	1.20	—1°
Upper St. Maurice....	56	70	42	28	83	20	3.80	—	11	1.10	—
Northwestern Districts	59	70	48	22	88	26	3.10	—5	9	2.14	0°
N.B.—All Stations.....	61	73	50	23	89	28	4.15	+5	8	2.58	—3° to —1°
N.S.—All Stations.....	60	72	49	23	90	30	1.75	—45	6	2.17	—5° to —1°
P.E.I.—All Stations....	63	71	55	16	80	46	3.20	—	6	1.24	—1°

# 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

SEPTEMBER.

Province or District.	Temperature (°Fahr.)						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	54	62	46	16	83	32	5.65	+125	15	4.28	-4° to -1°
N. Vancouver I.....	54	61	47	14	72	33	8.90	+120	17	2.49	-3° to 0°
Lower Fraser R.....	55	63	47	16	75	34	8.10	+ 65	14	3.90	-4° to +1°
Lillooet L.....	54	64	45	19	72	28	5.60	—	14	1.62	-2°
Upper Fraser R.....	48	60	37	23	79	20	2.25	+ 65	10	1.07	-5° to 0°
Peace R.....	47	61	34	27	80	18	1.20	—	6	0.55	-4°
Okanagan & Similkameen Valleys.....	54	65	43	22	76	24	0.70	- 35	9	0.47	-3° to -1°
W. Kootenay.....	51	63	39	24	80	21	2.00	+ 35	12	1.10	-5° to -1°
E. Kootenay.....	47	59	35	24	78	19	1.80	+ 5	10	1.70	-5° to -4°
Thompson R.....	52	64	40	24	79	20	1.10	- 5	9	0.60	-3° to -1°
N. Columbia R.....	44	53	35	18	69	26	6.20	+115	16	1.20	-4° to -3°
N. Coast.....	52	59	45	14	75	32	8.65	+ 15	13	1.91	-2° to -1°
Queen Charlotte I.....	52	57	47	10	62	40	7.00	—	15	1.25	-2°
Yukon—All Stations.....	41	53	30	23	72	9	0.30	- 35	7	0.42	-2° to -1°
Alberta—											
N. Saskatchewan R....	47	61	34	27	81	17	1.05	- 35	6	1.07	-4° to -1°
Red Deer R.....	46	60	32	28	87	16	0.95	- 35	5	1.33	-5° to -1°
Bow R.....	48	61	36	25	82	11	1.40	- 15	6	1.00	-5° to -2°
Athabasca R.....	46	59	33	26	76	12	0.85	—	6	0.85	-3° to -1°
Peace R.....	48	62	35	27	78	21	1.65	+ 25	5	1.21	-1° to +3°
Saskatchewan—											
Qu'Appelle R.....	50	62	39	23	99	20	3.85	+205	11	1.88	-1° to +5°
S. Saskatchewan R....	48	60	36	24	85	11	2.85	+ 90	8	2.17	-3° to -1°
N. Saskatchewan R....	48	60	36	24	86	23	2.35	+105	8	1.62	-3° to -1°
Saskatchewan Forks....	49	60	38	22	80	27	3.15	+105	10	1.70	+1° to +2°
Lower Saskatchewan R.	50	61	40	21	75	31	3.60	—	12	0.66	+1°
Barrier R.....	50	59	42	17	75	32	4.05	—	9	0.78	—
Manitoba—											
Qu'Appelle & Assiniboine Rs.....	54	65	44	21	98	29	4.35	+180	12	2.81	0° to +4°
Red R.....	56	67	45	22	95	24	3.10	+ 70	13	1.23	0° to +3°
Winnipeg R.....	55	64	46	18	85	34	2.95	—	14	1.00	—
Dauphin L. & R.....	54	66	43	23	93	30	3.60	+ 55	7	2.00	+3°
Lower Saskatchewan R.	51	60	43	17	68	30	2.80	—	10	0.77	+2°
Nelson R.....	45	52	38	14	72	30	2.75	—	12	0.72	—
Ontario—											
Rainy R.....	56	66	46	20	98	30	4.20	—	12	1.30	—
Kenora.....	54	63	46	17	86	29	4.65	—	7	1.40	+3°
Thunder B.....	54	63	45	18	93	25	3.85	+ 5	15	1.69	-1° to +7°
Algoma.....	54	66	43	23	88	22	4.75	—	11	2.43	+4°
Sudbury.....	59	71	47	24	94	25	4.50	—	13	2.07	—
Timiskaming.....	56	67	46	21	90	33	6.25	+ 85	16	2.55	+4° to +5°
Nipissing.....	55	69	41	28	90	26	4.20	—	8	1.69	+4°
Manitoulin I.....	63	71	55	16	84	37	4.05	—	6	1.37	+5°
Upper Ottawa R.....	58	72	44	28	92	14	3.25	- 55	7	2.04	+1° to +3°
Upper St. Lawrence & Ottawa Rs.....	63	75	51	24	95	32	2.40	- 20	6	1.25	+2° to +6°
Georgian B. Cos.....	63	74	53	21	93	28	2.45	- 5	8	1.00	+4° to +8°
L. Huron Cos.....	64	74	54	20	87	38	3.00	+ 10	7	1.25	+4° to +6°
Lakes St. Clair & Erie, Niagara Peninsula....	67	78	57	21	94	37	2.30	+ 20	7	2.09	-1° to +7°
W. Central Cos.....	64	76	52	24	90	32	3.35	+ 25	10	1.32	+1° to +8°
L. Ontario Cos.....	66	77	55	22	92	37	1.45	- 45	6	0.70	+2° to +9°
E. Central Cos.....	61	74	48	26	90	29	2.05	- 30	7	0.94	-1° to +6°
Quebec—											
Middle St. Lawrence..	58	70	46	24	92	27	3.30	- 5	9	2.30	0° to +4°
Lower St. Lawrence & Gulf.....	52	62	42	20	88	23	3.15	- 10	9	1.50	-3° to +1°
L. St. John.....	54	65	44	21	92	30	4.30	—	16	1.32	+1°
Upper St. Maurice....	54	65	44	21	88	24	2.85	—	5	0.95	—
Northwestern Districts	55	66	45	21	89	22	4.80	+ 30	11	2.62	+2°
N.B.—All Stations.....	57	70	45	25	92	22	3.10	- 5	8	1.51	-2° to +3°
N.S.—All Stations.....	58	69	47	22	93	23	2.40	- 30	7	2.60	-3° to +3°
P.E.I.—All Stations....	59	68	51	17	85	36	4.35	—	11	0.97	+1°

**1.—Temperature and Precipitation in 1921, by Months and Observation  
Stations—continued.**  
OCTOBER.

Province or District.	Temperature (°Fahr.)						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	50	57	43	14	88	24	10.65	+125	15	7.83	0° to +3°
N. Vancouver I.....	49	55	43	12	66	32	11.25	—	20	2.27	+1°
Lower Fraser R.....	51	59	44	15	81	28	12.90	+ 85	14	4.80	0° to +4°
Lillooet L.....	46	55	37	18	68	21	8.40	—	14	2.07	0°
Upper Fraser R.....	43	55	32	23	79	9	1.20	-30	9	0.70	-2° to +4°
Peace R.....	43	55	32	23	73	15	0.70	—	9	0.17	+3°
Okanagan & Similkameen Valleys.....	48	59	37	22	81	16	0.55	- 25	8	0.66	+1° to +3°
W. Kootenay.....	46	50	36	21	80	15	1.95	+ 10	12	1.29	0° to +4°
E. Kootenay.....	44	57	32	25	74	16	0.95	+ 10	7	0.54	+2° to +4°
Thompson R.....	47	59	35	24	76	22	0.65	- 35	7	0.56	+1° to +4°
N. Columbia R.....	42	51	33	18	70	19	3.25	+ 5	12	1.33	+2°
N. Coast.....	46	51	41	10	69	29	14.45	+15	18	3.98	+2°
Queen Charlotte I.....	48	53	44	9	62	33	9.90	—	23	1.49	+1°
Yukon—All Stations.....	29	36	23	13	60	- 3	1.50	+ 40	13	0.65	0°
Alberta—											
N. Saskatchewan R....	43	58	29	29	86	7	0.15	- 75	3	0.30	+3° to +6°
Red Deer R.....	45	60	30	30	84	7	0.10	- 90	2	0.20	0° to +7°
Bow R.....	48	62	34	28	86	12	0.20	- 80	2	0.52	+2° to +10°
Athabasca R.....	43	57	30	27	80	8	0.50	—	4	0.97	+3° to +4°
Peace R.....	43	54	32	22	74	19	0.65	+ 30	4	0.66	+5° to +10°
Saskatchewan—											
Qu'Appelle R.....	43	55	31	24	76	12	1.20	+ 70	4	1.67	+2° to +6°
S. Saskatchewan R....	45	59	32	27	80	18	0.65	- 30	3	0.84	+5° to +7°
N. Saskatchewan R....	43	57	30	27	78	14	0.25	- 70	2	0.58	+2° to +7°
Saskatchewan Forks...	43	54	32	22	76	16	0.45	- 45	5	0.26	+3° to +5°
Lower Saskatchewan R	41	52	30	22	72	22	0.35	—	6	0.15	+6°
Barrier R.....	40	51	30	21	68	20	1.56	—	4	1.25	—
Manitoba—											
Qu'Appelle & Assiniboine R.....	44	51	38	13	76	20	0.80	- 30	7	0.50	+1° to +6°
Red R.....	45	56	35	21	78	12	0.70	- 35	7	0.37	+3° to +5°
Winnipeg R.....	44	53	36	17	70	23	0.85	—	7	0.35	—
Dauphin Lake & R....	44	56	33	23	75	25	2.55	+160	7	1.55	+3° to +4°
Lower Saskatchewan R	41	51	31	20	69	25	0.20	—	2	0.15	+4°
Nelson R.....	37	43	32	11	63	20	1.10	—	10	1.01	+4°
Ontario—											
Rainy R.....	43	55	31	24	75	13	1.10	—	7	0.60	—
Kenora.....	43	51	35	16	68	19	0.95	—	6	0.53	+4°
Thunder B.....	42	51	34	17	70	17	1.45	+ 35	8	0.84	+1° to +6°
Algoma.....	40	50	30	20	67	8	1.25	—	6	1.00	+1°
Sudbury.....	43	52	34	18	68	16	1.80	—	10	1.85	—
Timiskaming.....	40	48	33	15	67	13	1.45	- 50	11	0.84	0° to +1°
Nipissing.....	43	54	33	21	65	21	4.00	—	13	1.10	0°
Manitoulin I.....	48	56	41	15	65	28	1.85	—	8	0.48	+1°
Upper Ottawa R.....	44	52	36	16	70	18	1.60	- 5	16	0.93	0°
Upper St. Lawrence & Ottawa R.....	47	56	38	18	80	17	3.80	+ 40	12	1.75	-1° to +3°
Georgian B. Cos.....	47	56	38	18	79	22	3.30	—	12	1.40	-2° to +2°
Lake Huron Cos.....	49	57	42	15	67	28	5.30	+ 50	14	1.40	0° to +2°
Lakes St. Clair & Erie, Niagara Pen.....	51	59	42	17	78	27	3.15	+ 25	9	1.32	-2° to +2°
W. Central Cos.....	48	57	39	18	85	21	4.15	+ 35	12	1.89	0° to +3°
L. Ontario Cos.....	48	57	40	17	72	26	4.40	+ 70	12	1.85	-2° to +3°
E. Central Cos.....	45	54	37	17	74	19	4.30	+ 60	11	1.60	-3° to +2°
Quebec—											
Middle St. Lawrence...	45	54	37	17	82	14	4.50	+ 30	12	2.20	-2° to +3°
Lower St. Lawrence & Gulf.....	40	48	32	16	79	- 2	1.80	+ 25	10	1.70	0° to -3°
Lake St. John.....	39	46	32	14	77	12	5.00	—	15	1.25	-2°
Upper St. Maurice.....	40	48	33	15	69	18	5.35	—	14	2.00	—
Northwestern Districts	39	47	31	16	65	8	2.75	- 10	10	1.96	-1°
N.B.—All Stations.....	46	57	35	22	82	12	2.40	- 35	8	1.33	0° to +4°
N.S.—All Stations.....	48	57	39	18	77	15	3.05	- 30	9	2.69	0° to +3°
P.E.I.—All Stations....	49	56	42	14	68	26	2.45	—	12	0.77	+1°



## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—continued.

## NOVEMBER.

Province or District.	Temperature (°Fahr.)						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	42	47	37	10	64	21	8.00	p.c.	17	2.95	-2° to +1°
N. Vancouver I.....	43	48	37	9	58	25	8.55	- 45	20	1.75	+1° to +3°
Lower Fraser River...	41	46	37	9	60	11	10.30	—	19	2.53	-2° to +1°
Lillooet Lake.....	35	39	31	8	55	5	6.40	—	13	2.20	0°
Upper Fraser River...	23	31	15	16	68	- 30	2.05	+ 5	10	0.70	-1° to -6°
Peace River.....	12	20	4	16	47	- 27	2.95	—	9	1.85	-8°
Okanagan and Similkameen Valleys.....	34	40	28	12	60	- 13	2.05	+ 40	14	0.62	-1° to -3°
West Kootenay.....	33	39	27	12	58	- 13	2.85	+ 5	13	1.30	-1° to -5°
East Kootenay.....	28	36	21	15	60	- 21	2.15	+ 20	11	1.00	0° to -1°
Thompson River.....	31	38	24	14	75	- 17	2.40	+ 45	12	1.30	-4° to +1°
North Columbia River	28	34	22	12	57	- 10	5.25	- 10	14	1.20	0° to -3°
North Coast.....	33	38	29	9	57	8	9.30	- 30	15	4.96	0° to -2°
Queen Charlotte I.....	38	44	33	11	53	19	7.60	—	18	1.50	-2°
Yukon—All Stations...	- 4	3	- 10	13	44	- 36	0.30	- 70	4	0.28	-10°
Alberta—											
N. Saskatchewan R...	16	25	7	18	60	- 33	0.55	- 20	7	0.50	-3° to -9°
The Red Deer River...	17	28	7	21	66	- 35	0.95	+ 60	6	0.65	-7° to -12°
The Bow River.....	21	31	12	19	70	- 38	1.70	+105	8	1.23	-2° to -11°
Athabasca River.....	17	25	9	16	62	- 37	0.70	—	7	0.50	-4° to -8°
Peace River.....	14	23	6	17	56	- 33	0.75	- 20	5	0.39	-3° to -8°
Saskatchewan—											
Qu'Appelle River.....	16	25	8	17	58	- 34	1.05	+ 60	7	0.44	-2° to -10°
N. Saskatchewan River	20	30	11	19	66	- 35	1.30	+ 85	6	1.40	-4° to -10°
S. Saskatchewan R...	15	23	7	16	57	- 30	0.75	+ 60	6	0.50	-2° to -5°
Saskatchewan Forks...	15	24	7	17	56	- 29	1.60	+105	11	0.45	-4° to -7°
Lower Saskatchewan R	12	20	5	15	50	- 27	1.20	—	4	0.30	-9°
Barrier River.....	13	22	5	17	50	- 25	2.45	—	11	0.40	
Manitoba—											
Qu'Appelle and Assiniboine Rivers.....	16	24	9	15	58	- 30	0.90	+ 10	8	0.40	-3° to -9°
The Red River.....	18	25	11	14	54	- 25	0.80	- 25	9	0.40	-3° to -8°
Winnipeg River.....	17	24	11	13	43	- 20	0.50	—	7	0.20	
Dauphin Lake and R...	17	25	10	15	55	- 19	1.25	—	3	0.60	-4° to -6°
Lower Saskatchewan R	10	18	2	16	41	- 30	0.30	—	9	0.05	-8°
Nelson River.....	6	13	- 1	14	37	- 31	1.00	—	12	0.40	-8°
Ontario—											
Rainy River.....	18	25	11	14	44	- 21	1.50	—	6	0.85	
Kenora.....	16	23	10	13	53	- 20	1.10	—	7	0.60	-9°
Thunder Bay.....	19	27	12	15	50	- 25	2.00	+ 5	9	1.60	0° to -7°
Algoma.....	19	29	10	19	56	- 28	2.15	—	12	0.60	-6°
Sudbury.....	23	30	16	14	53	- 13	2.35	—	11	0.96	
Timiskaming.....	19	26	12	14	53	- 15	2.50	- 20	13	1.06	-5° to -6°
Nipissing.....	25	36	15	21	60	- 14	3.15	—	12	1.11	-5°
Manitoulin Island...	30	36	24	12	51	- 9	3.59	—	12	0.73	-2°
Upper Ottawa River...	25	31	19	12	51	- 5	3.35	—	12	0.83	-5°
Upper St. Lawrence and Ottawa Rivers...	30	37	24	13	78	- 1	2.20	- 20	11	0.90	-1° to -5°
Georgian Bay Counties	32	38	26	12	64	- 1	2.30	—	10	2.00	-4° to +1°
Lake Huron Counties...	35	40	30	10	61	17	2.50	- 30	12	1.06	0° to -3°
Lakes St. Clair & Erie, Niagara Peninsula...	37	43	32	11	69	12	2.95	+ 20	13	1.10	0° to -4°
West Central Counties...	34	40	29	11	66	9	2.05	- 35	11	1.09	0° to -3°
Lake Ontario Counties	34	40	29	11	65	14	1.55	- 45	10	1.10	-3° to +1°
East Central Counties...	30	37	23	14	64	0	1.55	- 40	9	1.07	-2° to -4°
Quebec—											
Middle St. Lawrence...	27	34	20	14	72	- 15	2.90	—	12	1.27	-1° to -5°
Lower St. Lawrence and Gulf.....	24	32	17	15	65	- 10	2.05	- 35	10	1.00	-2° to -10°
Lake St. John.....	23	31	16	15	66	- 10	1.90	+ 20	10	0.93	0° to -2°
Upper St. Maurice...	22	32	13	19	60	- 18	2.16	—	9	0.69	-4°
Northwestern Districts	20	28	12	16	52	- 12	3.10	+ 20	11	1.17	-5°
N.B.—All Stations.....	28	35	21	14	62	- 11	4.20	+ 35	12	1.90	-4° to -5°
N.S.—All Stations.....	34	41	28	13	67	- 5	5.90	+ 25	15	1.60	-2° to -4°
P.E.I.—All Stations.....	33	38	28	10	59	13	4.20	+ 25	19	0.92	-4°

## 1.—Temperature and Precipitation in 1921, by Months and Observation Stations—concluded.

DECEMBER.

Province or District.	Temperature (°Fahr.)						Precipitation.				Station differences from normal temperature.
	Mean daily.	Mean daily maximum.	Mean daily minimum.	Mean daily range.	Extreme highest.	Extreme lowest.	Total in inches.	Difference from normal.	Number of days.	Greatest fall.	
British Columbia—											
S. Vancouver I.....	36	41	31	10	58	6	6.00	p.c. - 20	12	3.80	-2° to -5°
N. Vancouver I.....	35	41	30	11	56	10	3.25	—	10	1.20	-5°
Lower Fraser River..	34	39	29	10	57	4	8.10	- 10	11	2.98	0° to -5°
Lillooet Lake.....	20	25	15	10	41	19	0.85	—	6	1.50	-6°
Upper Fraser River...	12	21	3	18	49	42	3.80	- 55	5	0.97	-1° to -13°
Peace River.....	17	27	8	19	50	28	0.70	—	3	0.60	+6°
Okanagan and Similkameen Valleys.....	22	28	17	11	50	20	1.25	+ 25	9	0.94	-4° to -10°
West Kootenay.....	22	28	16	12	52	17	2.40	- 10	11	1.20	-6° to +1°
East Kootenay.....	14	22	7	15	55	30	2.35	+ 10	10	2.72	-3° to -7°
Thompson River.....	18	25	12	13	53	31	1.10	- 45	8	0.57	-4° to -10°
North Columbia River	12	20	5	15	48	33	2.85	- 30	9	1.20	-5° to -13°
North Coast.....	28	33	24	9	58	3	10.95	+ 10	16	6.13	-1° to -4°
Queen Charlotte I...	37	42	32	10	51	19	7.25	—	17	1.37	-2°
Yukon—All Stations...	0	9	—	18	40	32	0.70	- 25	10	0.18	+5° to +8°
Alberta—											
North Saskatchewan R.	12	24	1	23	59	48	0.15	- 75	2	0.18	-2° to +3°
The Red Deer River..	14	26	3	23	51	40	0.20	- 70	2	0.20	-1° to -8°
The Bow River.....	17	27	7	20	60	44	0.80	+ 5	4	1.10	-5° to +1°
Athabasca River.....	13	23	3	20	53	46	0.25	—	3	0.28	0° to +7°
Peace River.....	12	22	3	19	51	45	0.50	- 35	4	0.30	+3° to +8°
Saskatchewan—											
Qu'Appelle River.....	11	21	2	19	52	57	0.45	- 25	3	0.53	-5° to +8°
S. Saskatchewan River	16	26	7	19	57	34	0.35	- 50	3	0.49	+1° to +6°
N. Saskatchewan R...	8	18	—	19	45	48	0.15	- 60	2	0.40	-1° to +2°
Saskatchewan Forks...	7	16	—	18	42	44	0.35	- 35	3	0.45	-1° to +4°
Lower Saskatchewan R.	8	17	—	18	42	34	T	—	0	T	+5°
Barrier River.....	4	13	—	18	31	46	0.70	—	3	0.30	—
Manitoba—											
Qu'Appelle and Assiniboine Rivers.....	11	20	3	17	40	40	0.30	- 55	5	0.20	+3° to +5°
The Red River.....	8	17	0	17	43	40	0.40	- 45	5	0.30	+1° to +5°
Winnipeg River.....	9	17	1	16	36	30	0.60	—	7	0.15	—
Dauphin Lake and R...	15	24	6	18	49	28	0.30	—	2	0.20	+5°
Lower Saskatchewan R.	8	17	—	18	40	30	0.65	—	2	0.40	+6°
Nelson River.....	2	9	—	14	33	37	0.55	—	7	0.13	+5°
Ontario—											
Rainy River.....	10	19	2	17	38	38	0.80	—	5	0.50	—
Kenora.....	9	16	2	14	41	36	0.85	—	5	0.70	+2°
Thunder Bay.....	11	19	4	15	40	41	0.90	—	6	0.80	+1° to +4°
Algoma.....	10	21	—	22	60	45	3.05	—	11	1.62	0°
Sudbury.....	13	24	2	22	57	40	4.00	—	12	1.81	—
Timiskaming.....	11	20	3	17	48	40	4.25	+ 45	16	1.40	+1 to +3°
Nipissing.....	16	28	5	23	44	35	3.85	—	12	1.80	-4°
Manitoulin Island....	23	30	16	14	49	14	4.15	—	7	1.45	-2°
Upper Ottawa River...	13	22	5	17	46	32	1.90	—	8	0.35	-2°
Upper St. Lawrence... and Ottawa Rivers..	20	28	12	16	58	20	2.15	- 15	9	1.44	-3° to +2°
Georgian Bay Counties	22	30	15	15	58	21	3.40	- 10	9	2.50	-3° to +1°
Lake Huron Counties..	27	33	21	12	53	0	4.20	+ 10	15	1.70	0° to +2°
Lakes St. Clair & Erie, Niagara Peninsula...	29	36	23	13	58	3	2.35	- 10	8	1.53	-1° to +3°
West Central Counties.	26	33	19	14	60	6	3.40	+ 15	10	1.89	0° to +6°
Lake Ontario Counties	26	33	19	14	55	7	2.45	+ 10	8	1.70	-2° to +1°
East Central Counties.	20	29	11	18	50	21	2.55	—	7	1.57	-1° to +3°
Quebec—											
Middle St. Lawrence..	15	24	7	17	62	31	2.65	- 10	10	1.70	-6 to +4°
Lower St. Lawrence and Gulf.....	14	22	6	16	50	30	2.15	- 60	8	1.33	-5° to +1°
Lake St. John.....	9	19	10	19	45	48	1.95	+ 15	12	0.70	0° to +3°
Upper St. Maurice...	10	20	1	19	46	36	2.50	—	11	1.36	+2°
Northwestern Districts	11	21	2	19	54	44	2.65	+ 75	10	2.40	+3°
N.B.—All Stations.....	17	26	8	18	65	25	1.90	- 35	9	1.20	0° to -3°
N.S.—All Stations.....	26	33	19	14	57	10	3.70	- 15	10	1.82	-3° to +2°
P.E.I.—All Stations....	24	30	19	11	47	0	4.95	—	16	1.80	-1°

## 2.—Normal Temperature and Precipitation at Selected Canadian Stations.

VICTORIA, B.C.

Observations for 30 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High- est.	Low- est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	39.2	43.5	35.0	56.0	-2.0	8.5	3.88	6.3	4.51	6.54	2.56
Feb.....	40.3	45.0	35.6	60.0	6.0	9.4	3.08	4.5	3.53	6.20	0.96
March.....	43.1	49.2	37.0	68.0	17.0	12.2	2.40	1.5	2.55	4.58	0.67
April.....	47.7	54.9	40.6	75.0	24.0	14.3	1.73	S	1.73	5.40	0.21
May.....	53.0	60.7	45.3	83.0	31.0	15.4	1.30	-	1.30	2.83	0.35
June.....	57.1	65.1	49.0	88.0	36.0	16.1	0.93	-	0.93	2.37	0.08
July.....	60.3	69.2	51.2	90.0	37.0	18.0	0.36	-	0.36	1.15	R
Aug.....	60.0	68.3	51.2	88.0	37.0	17.6	0.65	-	0.65	2.26	0.00
Sept.....	55.6	63.3	47.9	85.0	30.0	15.4	2.01	-	2.01	4.27	0.32
Oct.....	50.4	56.0	44.8	70.0	28.0	11.2	2.55	-	2.55	5.60	0.46
Nov.....	44.5	48.6	40.5	63.0	17.0	8.1	6.31	1.5	6.46	11.50	0.91
Dec.....	41.5	45.1	37.8	59.0	8.0	7.3	5.86	0.5	5.91	12.41	1.66
Year.....	49.4	55.8	43.0	90.0	-2.0	12.8	31.06	14.3	32.49	51.03	22.58

VANCOUVER, B.C.

Observations for 30 years.

Jan.....	35.0	39.2	30.9	55.0	2.0	8.3	7.12	14.4	8.56	10.54	6.08
Feb.....	37.8	43.1	32.5	58.0	10.0	10.6	5.90	3.2	6.22	10.17	2.60
March.....	41.9	49.0	34.8	61.0	15.0	14.2	4.31	1.5	4.46	10.29	0.89
April.....	47.0	55.8	38.3	79.0	27.0	17.5	3.09	-	3.09	5.29	1.04
May.....	53.5	62.3	44.7	80.0	33.0	17.6	3.56	-	3.56	5.39	1.44
June.....	58.4	67.7	49.1	88.0	36.0	18.6	2.82	-	2.82	5.42	1.43
July.....	63.2	73.3	53.0	90.0	43.0	20.3	1.33	-	1.33	2.45	0.32
Aug.....	61.5	71.0	52.0	92.0	39.0	19.0	1.71	-	1.71	5.86	0.22
Sept.....	55.7	64.0	47.4	82.0	30.0	16.6	4.29	-	4.29	9.09	1.61
Oct.....	49.2	55.7	42.6	69.0	23.0	13.1	5.69	-	5.69	9.20	1.76
Nov.....	42.4	47.1	37.6	63.0	15.0	9.5	10.97	3.1	11.28	18.99	4.18
Dec.....	38.9	42.8	35.0	58.0	17.0	7.8	7.27	2.9	7.56	9.55	4.21
Year.....	48.7	56.0	41.5	92.0	2.0	14.5	58.06	25.1	60.57	72.29	52.27

PORT SIMPSON, B.C.

Observations for 20 years.

Jan.....	34.0	40.0	28.1	64.0	- 9.0	11.9	8.62	9.8	9.60	16.74	1.08
Feb.....	34.8	41.8	27.7	63.0	-10.0	14.1	6.07	11.3	7.25	16.65	1.93
Mar.....	37.6	44.8	30.3	63.0	11.0	14.5	5.06	5.3	5.59	8.16	1.41
April.....	41.6	49.9	33.4	73.0	18.0	16.5	4.85	3.0	5.15	14.31	2.24
May.....	48.3	56.5	40.0	79.0	27.0	16.5	5.14	-	5.14	9.84	1.63
June.....	52.8	60.5	45.1	88.0	34.0	15.4	4.26	-	4.26	7.50	1.20
July.....	56.0	63.3	48.8	88.0	29.0	14.5	4.42	-	4.42	9.41	1.28
Aug.....	56.7	63.8	49.5	80.0	31.0	14.3	6.93	-	6.93	14.11	1.74
Sept.....	52.2	59.1	45.2	74.0	30.0	13.9	9.03	-	9.03	14.63	2.20
Oct.....	47.1	53.5	40.7	65.0	28.0	12.8	12.21	-	12.21	16.99	6.71
Nov.....	39.7	45.6	33.7	65.0	6.0	11.9	11.47	1.6	11.63	23.90	3.26
Dec.....	36.9	42.6	31.2	62.0	5.0	11.4	10.11	8.7	10.98	18.82	5.23
Year.....	44.8	51.8	37.8	88.0	-10.0	14.0	88.17	40.2	92.19	126.48	62.05

## 2.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

KAMLOOPS, B.C.

Observations for 22 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High- est.	Low- est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	22.4	28.3	16.5	54.0	-31.0	11.8	0.13	7.7	0.90	0.60	0.35
Feb.....	26.5	33.4	19.6	64.0	-27.0	13.8	0.20	6.0	0.80	1.17	0.02
March.....	37.6	47.3	27.8	70.0	- 6.0	19.5	0.20	1.2	0.32	0.83	0.01
April.....	49.7	61.1	38.3	92.0	19.0	22.8	0.36	S	0.36	1.36	R
May.....	57.5	70.3	44.8	100.0	26.0	25.5	0.93	-	0.93	2.50	R
June.....	64.6	76.4	52.7	101.0	35.0	23.7	1.23	-	1.23	3.07	0.57
July.....	69.6	82.7	56.5	102.0	42.0	26.2	1.27	-	1.27	3.50	0.35
Aug.....	68.1	80.9	55.4	101.0	35.0	25.5	1.05	-	1.05	3.73	0.00
Sept.....	58.4	69.3	47.4	93.0	28.0	21.9	0.94	-	0.94	2.34	0.10
Oct.....	47.8	56.2	39.3	82.0	16.0	16.9	0.57	0.2	0.59	1.41	R
Nov.....	35.8	41.5	30.2	72.0	-22.0	11.3	0.40	6.5	1.05	1.23	0.07
Dec.....	28.8	32.6	24.9	59.0	-17.0	7.7	0.20	13.5	1.55	0.64	0.12
Year.....	47.2	56.7	37.8	102.0	-31.0	18.9	7.48	35.1	10.99	13.47	7.07

DAWSON, YUKON.

Observations for 30 years.

Jan.....	-24.6	-18.0	-31.3	30.0	-68.0	13.3	0.00	8.6	0.86	1.73	R
Feb.....	-12.0	- 4.3	-19.6	45.0	-55.0	23.9	R	7.3	0.73	1.35	0.20
Mar.....	5.6	16.5	- 5.3	52.0	-47.0	21.8	0.01	4.7	0.48	1.21	0.00
April.....	27.6	40.2	15.1	67.0	-30.0	25.1	0.18	4.7	0.65	1.68	0.23
May.....	46.8	59.0	34.6	85.0	12.0	24.4	0.83	0.4	0.87	2.00	0.25
June.....	56.9	70.3	43.6	90.0	27.0	26.7	1.18	0.3	1.21	2.66	0.25
July.....	59.4	71.9	46.8	95.0	31.0	25.1	1.61	-	1.61	3.32	0.62
Aug.....	54.0	66.2	41.7	85.0	23.0	24.5	1.51	-	1.51	2.38	0.07
Sept.....	41.6	51.1	32.2	78.0	8.0	18.9	1.40	1.8	1.58	3.52	0.86
Oct.....	26.4	32.7	20.1	68.0	-22.0	12.6	0.29	8.8	1.17	4.09	0.10
Nov.....	0.4	6.4	- 5.6	46.0	-48.0	12.0	0.01	12.4	1.25	2.60	0.24
Dec.....	-10.2	-4.3	-16.1	38.0	-63.0	11.8	R	10.9	1.09	2.09	0.08
Year.....	22.6	33.0	13.0	95.0	-68.0	20.0	7.02	59.9	13.01	17.75	6.28

EDMONTON, ALBERTA.

Observations for 30 years.

Jan.....	5.9	15.6	- 3.8	57.0	-57.0	19.4	0.06	7.0	0.76	2.49	0.05
Feb.....	10.6	21.1	0.1	62.0	-57.0	21.0	0.00	6.7	0.67	2.33	S
Mar.....	23.4	34.9	11.9	72.0	-40.0	23.0	0.05	6.2	0.67	1.93	R
April.....	40.8	52.9	28.6	84.0	-15.0	24.3	0.44	3.6	0.80	2.60	0.04
May.....	51.2	64.4	38.1	90.0	10.0	26.3	1.73	1.3	1.86	4.04	0.20
June.....	57.3	70.1	44.4	94.0	25.0	25.7	3.26	S	3.26	8.53	0.00
July.....	61.2	73.7	48.8	94.0	33.0	24.9	3.56	-	3.56	11.13	0.15
Aug.....	59.0	71.6	46.4	90.0	26.0	25.2	2.47	-	2.47	6.43	0.49
Sept.....	50.4	62.9	37.8	87.0	12.0	25.1	1.33	0.7	1.40	4.32	0.00
Oct.....	41.7	53.2	30.3	82.0	-10.0	22.9	0.39	3.5	0.74	1.86	0.00
Nov.....	24.5	33.3	15.6	74.0	-37.0	17.7	0.06	6.7	0.73	3.57	0.00
Dec.....	16.0	24.7	7.3	60.0	-43.0	17.4	0.07	6.8	0.75	3.21	0.00
Year.....	36.9	48.2	25.6	94.0	-57.0	22.6	13.42	42.5	17.67	27.81	8.16



## 2.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

## MEDICINE HAT, ALBERTA.

Observations for 30 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	Highest.	Lowest.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	11.2	21.6	0.7	62.0	-51.0	20.9	0.00	6.1	0.61	1.72	0.00
Feb.....	12.8	23.5	2.1	64.0	-46.0	21.4	0.01	6.0	0.61	1.51	0.00
Mar.....	26.7	38.4	14.9	84.0	-38.0	23.5	0.11	5.0	0.61	1.62	S
April.....	45.1	58.8	31.4	96.0	-16.0	27.4	0.37	2.4	0.61	2.26	0.03
May.....	54.7	68.0	41.5	99.0	12.0	26.5	1.70	0.5	1.75	6.29	0.12
June.....	62.5	75.6	49.3	107.0	30.0	26.3	2.57	S	2.57	5.62	0.00
July.....	68.4	82.7	54.1	108.0	36.0	28.6	1.73	—	1.73	4.83	0.00
Aug.....	66.0	80.7	51.4	104.0	31.0	29.3	1.51	—	1.51	5.65	0.00
Sept.....	56.5	70.2	42.7	94.0	17.0	27.5	0.88	0.4	0.92	2.41	0.00
Oct.....	45.8	58.7	32.9	93.0	-10.0	25.8	0.51	1.1	0.62	3.43	0.00
Nov.....	29.3	39.9	18.7	76.0	-36.0	21.2	0.08	6.4	0.72	3.11	R
Dec.....	21.1	31.0	11.2	68.0	-37.0	19.8	0.06	4.7	0.53	1.42	0.00
Year.....	41.7	54.1	29.2	108.0	-51.0	22.2	11.53	32.6	12.79	22.28	6.72

## FORT VERMILION, ALBERTA.

Observations for 18 years.

Jan.....	- 14.8	- 2.5	- 27.1	50.0	-77.0	24.6	0.00	4.7	0.47	1.80	0.15
Feb.....	- 3.9	9.7	- 17.5	53.0	-58.0	27.2	0.00	3.7	0.37	0.65	0.20
Mar.....	11.8	26.0	- 2.4	63.0	-41.0	28.4	0.01	7.0	0.71	1.70	0.00
April.....	32.0	44.5	19.5	78.0	-29.0	25.0	0.23	6.1	0.84	1.85	0.00
May.....	49.3	63.3	35.3	93.0	13.0	28.0	0.78	0.6	0.84	2.06	0.00
June.....	57.9	72.2	43.7	98.0	26.0	28.5	1.65	0.1	1.66	3.44	0.25
July.....	61.0	75.2	46.9	94.0	28.0	28.3	1.60	—	1.60	3.49	0.51
Aug.....	57.1	70.4	43.8	101.0	28.0	26.6	1.57	—	1.57	3.32	0.53
Sept.....	47.3	58.2	36.4	84.0	9.0	21.8	1.40	0.1	1.41	2.33	0.64
Oct.....	* 33.1	43.1	23.1	70.0	-14.0	20.0	0.26	2.1	0.47	0.81	0.00
Nov.....	14.0	22.4	5.6	48.0	-26.0	16.8	0.02	7.2	0.74	1.40	0.20
Dec.....	- 1.7	10.2	- 13.6	65.0	-50.0	23.8	0.00	5.0	0.50	1.60	0.20
Year.....	28.6	41.1	16.1	101.0	-77.0	25.0	7.52	36.6	11.18	14.78	7.60

## FORT CHIPEWYAN, ALBERTA.

Observations for 16 years.

Jan.....	- 11.9	- 3.5	- 20.4	45.0	-55.0	16.9	0.00	9.0	0.90	1.68	0.02
Feb.....	- 9.1	0.5	- 18.7	46.0	-56.0	19.2	R	5.8	0.58	2.03	0.03
Mar.....	5.0	15.1	- 5.0	47.0	-41.0	20.1	R	5.8	0.58	1.58	0.09
April.....	28.5	39.4	17.6	69.0	-22.0	21.8	0.20	4.4	0.64	3.04	0.06
May.....	44.5	53.8	35.1	83.0	- 3.0	18.7	0.65	1.6	0.81	2.08	0.02
June.....	54.0	64.6	43.3	90.0	24.0	21.3	1.56	0.1	1.57	3.31	0.10
July.....	61.5	71.0	51.9	93.0	26.0	19.1	2.64	—	2.64	9.52	0.21
Aug.....	58.1	68.1	48.2	89.0	25.0	19.9	1.64	—	1.64	3.67	0.39
Sept.....	45.2	53.0	37.3	79.0	13.0	15.7	1.52	0.5	1.57	2.93	0.27
Oct.....	33.7	40.1	27.3	66.0	- 9.0	12.8	0.32	4.3	0.75	5.30	0.02
Nov.....	11.0	17.9	4.2	56.0	-33.0	13.7	0.05	8.6	0.91	2.28	0.26
Dec.....	2.2	10.3	- 5.9	49.0	-48.0	16.2	0.01	9.1	0.92	3.20	0.09
Year.....	26.9	35.8	17.9	90.0	-55.0	17.9	8.59	49.2	13.51	16.99	6.70

## 2.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

QU'APPELLE, SASK.

Observations for 30 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High- est.	Low- est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	- 0.6	8.5	- 9.7	50.0	-47.0	18.2	0.00	6.9	0.69	2.28	0.05
Feb.....	2.0	11.2	- 7.2	50.0	-55.0	18.4	0.00	8.1	0.81	2.85	0.12
Mar.....	16.0	25.7	6.2	76.0	-45.0	19.5	0.06	9.6	1.02	4.11	0.05
April.....	37.3	49.1	25.5	89.0	-24.0	23.6	0.43	6.7	1.10	3.59	0.29
May.....	49.8	62.4	37.3	92.0	8.0	25.1	2.40	3.1	2.71	6.95	0.25
June.....	59.6	70.8	48.4	101.0	25.0	22.4	3.69	S.	3.69	7.19	0.32
July.....	63.8	75.9	51.7	100.0	34.0	24.2	2.84	-	2.84	7.25	0.58
Aug.....	61.1	73.3	48.9	100.0	27.0	24.4	2.04	-	2.04	5.03	0.30
Sept.....	52.0	64.0	39.9	93.0	12.0	24.1	1.23	1.0	1.38	4.61	0.08
Oct.....	40.8	51.5	30.2	86.0	-12.0	21.3	0.53	4.5	0.98	3.35	S.
Nov.....	21.8	30.4	13.3	73.0	-30.0	17.1	0.14	8.4	0.98	2.51	0.12
Dec.....	10.7	18.5	2.8	49.0	-40.0	15.7	0.01	7.1	0.72	3.11	0.03
Year.....	34.5	45.1	23.9	101.0	-55.0	21.2	13.42	55.4	18.96	26.47	10.14

PRINCE ALBERT, SASK.

Observations for 30 years.

Jan.....	- 5.9	5.3	-17.1	53.0	-67.0	22.4	0.00	8.2	0.82	2.00	0.22
Feb.....	- 1.3	11.3	-13.9	52.0	-70.0	25.2	0.01	6.8	0.69	2.15	0.04
Mar.....	12.1	26.2	- 2.1	68.0	-44.0	28.3	0.10	7.7	0.87	2.56	0.17
April.....	36.1	48.7	23.6	86.0	-23.0	25.1	0.33	4.4	0.82	3.37	0.03
May.....	48.9	62.6	35.2	90.0	2.0	27.4	1.34	1.6	1.50	4.87	0.01
June.....	58.1	71.0	45.1	96.0	17.0	25.9	2.67	-	2.67	7.36	1.00
July.....	62.0	74.2	49.8	93.0	33.0	24.4	2.31	-	2.31	5.31	0.17
Aug.....	58.8	71.7	46.0	94.0	22.0	25.7	2.31	-	2.31	8.01	R.
Sept.....	49.4	61.7	37.1	87.0	14.0	24.6	1.32	0.7	1.39	2.94	0.09
Oct.....	38.3	49.2	27.4	85.0	- 5.0	21.8	0.57	2.3	0.80	1.97	0.10
Nov.....	18.5	27.4	9.5	66.0	-41.0	17.9	0.12	8.7	0.99	3.06	0.07
Dec.....	5.3	15.1	- 4.5	58.0	-57.0	19.6	0.01	8.0	0.81	2.61	0.19
Year.....	31.7	43.7	19.7	96.0	-70.0	24.0	11.13	48.4	15.97	29.83	9.25

WINNIPEG, MAN.

Observations for 30 years.

Jan.....	- 3.5	6.8	-13.8	42.0	-46.0	20.6	0.01	8.1	0.82	2.12	0.12
Feb.....	- 0.5	10.7	-11.8	46.0	-46.0	22.5	0.01	7.4	0.75	1.80	0.03
Mar.....	15.2	26.7	3.6	73.0	-37.0	23.1	0.21	9.6	1.17	3.00	0.29
April.....	38.7	50.1	27.4	90.0	-13.0	22.7	1.10	4.4	1.54	5.64	0.25
May.....	51.5	64.5	38.5	94.0	11.0	26.0	2.06	0.9	2.15	6.38	0.11
June.....	62.6	74.9	50.2	101.0	21.0	24.7	3.03	-	3.03	6.30	0.45
July.....	66.2	78.1	54.3	96.0	35.0	23.8	3.25	-	3.25	7.14	0.87
Aug.....	62.7	75.0	50.4	103.0	30.0	24.6	2.18	-	2.18	4.75	0.77
Sept.....	54.1	65.9	42.2	99.0	17.0	23.7	2.07	0.1	2.08	5.49	0.60
Oct.....	41.6	52.0	31.3	85.0	- 3.0	20.7	1.22	1.4	1.36	5.67	0.29
Nov.....	22.0	30.8	13.3	71.0	-33.0	17.5	0.17	8.2	0.99	2.34	0.06
Dec.....	7.2	16.7	- 2.4	49.0	-44.0	19.1	0.06	8.6	0.92	3.99	0.11
Year.....	34.8	46.0	23.6	103.0	-46.0	22.4	15.37	48.7	20.24	28.40	14.38

## 2.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

## PORT ARTHUR, ONT.

Observations for 30 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High- est.	Low- est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	6.2	17.1	- 4.6	48.0	-40.0	21.7	0.02	7.4	0.76	1.46	0.21
Feb.....	8.2	19.7	- 3.3	52.0	-51.0	23.0	0.05	6.5	0.70	2.77	0.04
Mar.....	19.6	30.8	8.4	70.0	-42.0	22.4	0.11	8.1	0.92	2.76	0.18
April.....	35.6	44.7	26.4	78.0	- 3.0	18.3	1.19	3.6	1.55	3.09	0.07
May.....	46.0	55.6	36.5	89.0	16.0	19.1	1.98	0.5	2.03	4.10	0.36
June.....	57.1	67.2	47.0	91.0	20.0	20.2	2.69	-	2.69	6.94	0.50
July.....	62.6	73.5	51.7	96.0	33.0	21.8	3.76	-	3.76	9.21	1.39
Aug.....	59.0	70.6	47.5	94.0	31.0	23.1	2.77	-	2.77	5.06	1.02
Sept.....	52.8	62.3	43.3	88.0	19.0	19.0	3.26	-	3.26	7.54	1.30
Oct.....	41.5	50.6	32.9	80.0	1.0	17.7	2.39	0.9	2.48	5.27	0.37
Nov.....	26.7	34.6	18.7	69.0	-22.0	15.9	0.84	6.2	1.46	4.29	0.35
Dec.....	13.4	22.7	4.1	51.0	-38.0	18.6	0.18	6.6	0.84	2.68	0.02
Year.....	35.7	45.8	25.7	96.0	-51.0	20.1	19.24	39.8	23.22	29.43	18.80

## TORONTO, ONT.

Observations for 70 years.

Jan.....	22.1	29.1	15.2	58.0	-26.0	13.9	1.14	17.3	2.87	5.72	0.61
Feb.....	21.7	29.2	14.1	54.0	-25.0	15.1	0.93	16.5	2.58	5.21	0.29
Mar.....	29.0	36.3	21.9	75.0	-16.0	14.4	1.50	11.5	2.65	6.70	0.66
April.....	41.4	49.5	33.3	90.0	6.0	16.3	2.15	2.5	2.40	4.90	0.09
May.....	52.7	62.0	43.3	93.0	25.0	18.7	2.97	0.1	2.98	9.36	0.52
June.....	62.6	72.4	52.9	97.0	28.0	19.5	2.76	-	2.76	8.09	0.57
July.....	68.1	77.9	58.2	103.0	39.0	19.7	3.04	-	3.04	5.63	0.36
Aug.....	66.6	76.1	57.1	102.0	40.0	19.0	2.77	-	2.77	7.09	R.
Sept.....	59.2	68.2	50.2	97.0	28.0	18.0	3.18	-	3.18	9.76	0.40
Oct.....	47.0	54.9	39.1	86.0	16.0	15.8	2.40	0.6	2.46	5.96	0.56
Nov.....	36.3	42.5	30.1	70.0	- 5.0	12.4	2.49	4.6	2.95	5.84	0.11
Dec.....	26.3	32.5	20.0	61.0	-21.0	12.5	1.53	13.0	2.83	6.00	0.47
Year.....	44.4	52.6	36.3	103.0	-26.0	16.3	26.86	66.0	33.46	50.18	24.84

## PARRY SOUND, ONT.

Observations for 40 years.

Jan.....	14.3	24.5	4.0	54.0	-38.0	20.5	0.87	31.5	4.02	7.75	1.76
Feb.....	13.7	24.9	2.6	58.0	-38.0	22.3	0.76	23.4	3.10	6.31	0.46
Mar.....	23.5	34.3	12.8	71.0	-27.0	21.5	1.33	14.8	2.81	5.49	0.75
April.....	39.0	49.4	28.5	82.0	- 3.0	20.9	1.76	3.1	2.07	4.03	0.75
May.....	51.5	62.4	40.6	90.0	16.0	21.8	2.96	0.6	3.02	6.06	0.58
June.....	61.8	72.7	50.9	94.0	31.0	21.8	2.47	-	2.47	5.47	0.70
July.....	66.5	76.9	56.1	98.0	37.0	20.8	2.80	-	2.80	9.02	1.10
Aug.....	64.2	74.5	54.0	93.0	35.0	20.5	2.83	-	2.83	5.46	0.63
Sept.....	55.7	67.6	47.9	90.0	24.0	19.7	4.49	S.	4.49	8.43	1.52
Oct.....	45.8	54.5	37.1	84.0	9.0	17.4	3.83	0.9	3.92	6.33	0.57
Nov.....	33.5	40.8	26.2	69.0	-20.0	14.6	2.63	14.9	4.12	7.33	2.09
Dec.....	20.5	29.7	11.4	56.0	-39.0	18.3	1.22	32.3	4.45	8.16	2.18
Year.....	41.0	51.0	31.0	98.0	-39.0	20.0	27.95	121.5	40.10	50.30	31.59

## 2.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

COTTAM, ONT.

Observations for 20 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High-est.	Low-est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	22.0	31.6	12.3	62.0	-20.0	19.3	1.59	11.8	2.77	6.01	1.45
Feb.....	21.1	30.9	11.3	57.0	-25.0	19.6	1.61	10.1	2.62	6.16	1.11
Mar.....	32.8	42.8	22.8	80.0	- 8.0	20.0	1.90	6.8	2.58	6.30	1.07
April.....	43.7	54.6	32.7	87.0	10.0	21.9	2.34	2.1	2.55	4.54	0.47
May.....	55.6	67.6	43.6	95.0	19.0	24.0	3.58	0.2	3.60	6.76	1.48
June.....	64.6	76.6	52.6	95.0	30.0	24.0	4.18	-	4.18	7.21	0.41
July.....	70.6	83.0	58.2	100.0	36.0	24.8	3.38	-	3.38	7.08	0.66
Aug.....	68.9	81.6	56.2	100.0	35.0	25.4	2.49	-	2.49	5.66	0.00
Sept.....	61.6	74.4	48.9	97.0	26.0	25.5	2.18	-	2.18	5.50	1.09
Oct.....	49.4	61.7	37.1	85.0	10.0	24.6	2.48	0.1	2.49	5.36	1.07
Nov.....	37.8	47.9	27.8	74.0	8.0	20.1	2.40	2.7	2.67	5.04	1.05
Dec.....	26.4	35.0	17.9	70.0	-11.0	17.1	1.82	8.2	2.64	4.42	0.90
Year.....	46.2	57.3	35.1	100.0	-25.0	22.2	29.95	42.0	34.15	38.97	26.67

HAILEYBURY, ONT.

Observations for 20 years.

Jan.....	6.4	17.4	- 4.6	48.0	-40.0	22.0	0.27	17.5	2.02	3.43	1.20
Feb.....	7.8	14.0	- 3.4	48.0	-48.0	17.4	0.20	18.0	2.00	3.94	0.54
Mar.....	19.4	21.6	8.2	66.0	-34.0	13.4	0.52	16.0	2.12	4.43	0.59
April.....	37.1	48.0	26.2	81.0	- 3.0	21.8	1.25	5.8	1.83	4.38	0.88
May.....	50.8	62.2	39.4	93.0	14.0	22.8	2.83	1.5	2.98	4.73	0.75
June.....	61.7	73.4	50.0	100.0	28.0	23.4	2.91	-	2.91	5.55	0.72
July.....	66.0	76.8	55.4	102.0	36.0	21.4	2.72	-	2.72	8.21	1.55
Aug.....	62.2	72.7	51.8	94.0	30.0	29.9	2.88	-	2.88	4.45	1.14
Sept.....	55.3	64.9	45.7	91.0	24.0	19.2	2.31	-	2.31	7.44	0.96
Oct.....	43.0	51.5	34.4	80.0	13.0	17.1	2.58	2.8	2.86	5.20	0.97
Nov.....	23.2	35.2	21.1	67.0	-15.0	14.1	0.99	13.7	2.36	4.35	0.43
Dec.....	13.6	22.0	5.2	51.0	-34.0	16.8	0.75	19.9	2.74	3.95	0.88
Year.....	37.1	46.7	27.5	102.0	-48.0	19.2	20.21	95.2	29.73	39.77	27.13

MONTREAL, QUE.

Observations for 50 years.

Jan.....	12.7	20.8	4.6	53.0	-26.0	16.2	0.85	31.4	3.99	6.18	2.08
Feb.....	14.3	21.8	6.8	47.0	-24.0	15.0	0.72	26.1	3.33	6.35	0.49
Mar.....	24.6	31.7	17.4	61.0	-15.0	14.3	1.45	19.5	3.40	7.32	1.01
April.....	41.3	49.3	33.4	77.0	8.0	15.9	1.69	5.3	2.22	4.19	0.48
May.....	52.9	61.6	44.3	89.0	23.0	17.3	3.01	0.1	3.02	6.22	0.11
June.....	63.9	73.6	54.3	92.0	38.0	19.3	3.21	-	3.21	8.00	0.90
July.....	69.1	77.4	60.8	95.0	47.0	16.6	3.95	-	3.95	7.72	0.96
Aug.....	66.1	74.0	58.2	90.0	43.0	15.8	3.35	-	3.35	7.89	1.23
Sept.....	58.5	66.2	50.8	90.0	33.0	15.4	3.46	-	3.46	6.65	0.88
Oct.....	46.0	52.9	39.1	80.0	21.0	13.8	3.13	1.4	3.27	7.47	0.65
Nov.....	33.3	39.2	27.4	68.0	0.0	11.8	2.26	11.7	3.43	6.40	1.44
Dec.....	19.6	26.5	12.7	59.0	-21.0	13.8	1.17	25.2	3.69	5.94	1.12
Year.....	41.8	49.6	34.1	95.0	-26.0	15.5	28.25	120.7	40.32	48.01	30.97



## 2.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

## QUEBEC, QUE.

Observations for 20 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High-est.	Low-est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	9.7	17.7	1.8	47.0	-34.0	15.9	0.64	30.7	3.71	6.58	1.10
Feb.....	12.0	20.2	3.7	49.0	-32.0	16.5	0.74	27.3	3.47	6.22	0.98
Mar.....	22.8	30.7	15.0	64.0	-23.0	15.5	1.29	19.9	3.28	6.16	1.05
April.....	37.0	45.3	28.7	80.0	3.0	16.6	1.42	6.4	2.06	6.57	0.70
May.....	52.0	62.0	42.0	85.0	21.0	20.0	3.01	0.4	3.05	6.93	0.27
June.....	61.2	70.8	51.5	90.0	34.0	19.3	3.83	—	3.83	9.23	1.32
July.....	66.1	75.7	56.6	96.0	39.0	19.1	4.30	—	4.30	7.12	0.53
Aug.....	62.8	71.5	54.1	90.0	38.0	17.4	4.00	—	4.00	9.58	1.35
Sept.....	55.3	63.6	46.9	88.0	29.0	16.7	3.77	—	3.77	8.75	1.08
Oct.....	42.0	47.8	36.3	77.0	14.0	11.5	2.94	1.5	3.09	6.99	0.93
Nov.....	32.2	35.7	28.7	66.0	-10.0	7.0	1.75	14.2	3.17	7.09	0.90
Dec.....	15.0	22.2	7.8	55.0	-27.0	14.4	0.85	25.2	3.37	6.78	1.13
Year.....	39.0	47.0	31.1	96.0	-34.0	15.9	28.54	125.6	41.10	52.39	32.12

## ANTICOSTI (SOUTH WEST POINT), QUEBEC.

Observations for 30 years.

Jan.....	11.9	19.8	4.0	47.0	-40.0	15.8	0.58	18.3	2.41	6.70	0.54
Feb.....	12.5	19.7	5.3	46.0	-35.0	14.4	0.25	14.7	1.72	4.70	0.27
Mar.....	21.0	27.1	15.0	47.0	-20.0	12.1	0.50	12.0	1.70	4.95	0.29
April.....	30.5	35.4	25.6	71.0	- 3.0	9.8	1.12	5.6	1.68	7.92	R-05
May.....	39.8	45.0	34.5	78.0	19.0	10.5	2.40	0.4	2.44	4.68	0.05
June.....	43.4	53.4	43.5	85.0	26.0	9.9	2.93	0.1	2.94	5.58	0.40
July.....	56.6	62.3	51.0	79.0	34.0	11.3	3.14	—	3.14	8.70	0.43
Aug.....	56.2	61.5	51.0	80.0	28.0	10.5	3.43	—	3.43	4.92	0.76
Sept.....	43.7	54.4	43.0	73.0	20.0	11.4	2.92	—	2.92	4.81	0.70
Oct.....	39.8	45.1	34.5	68.0	8.0	10.6	3.40	0.5	3.45	9.85	0.54
Nov.....	30.2	35.4	25.1	57.0	- 1.0	10.3	2.05	6.4	2.69	4.54	0.49
Dec.....	20.5	27.2	13.8	52.0	-39.0	13.4	0.65	14.7	2.12	5.10	0.32
Year.....	34.7	40.5	28.9	85.0	-40.0	11.6	23.37	72.7	30.64	45.43	15.83

## FREDERICTON, NEW BRUNSWICK.

Observations for 30 years.

Jan.....	13.3	24.3	2.2	55.0	-34.0	22.1	1.64	23.9	4.03	8.34	1.36
Feb.....	15.4	26.6	4.1	51.0	-35.0	22.5	0.96	47.0	5.66	4.78	0.48
Mar.....	26.5	36.9	16.0	65.0	-20.0	20.9	2.16	25.6	4.72	7.58	1.32
April.....	38.9	49.5	28.3	82.0	- 2.0	21.2	1.97	10.0	2.97	4.43	0.30
May.....	51.2	62.8	39.6	92.0	24.0	23.2	3.21	0.1	3.22	9.08	0.88
June.....	59.6	71.7	47.5	92.0	26.0	24.2	3.71	—	3.71	8.01	1.47
July.....	65.9	77.0	54.8	96.0	40.0	22.2	3.03	—	3.03	6.28	1.26
Aug.....	63.2	73.7	52.7	95.0	35.0	21.0	3.97	—	3.97	6.99	0.76
Sept.....	55.3	66.1	44.5	92.0	25.0	21.6	3.54	—	3.54	7.73	0.91
Oct.....	43.4	54.2	32.6	81.0	15.0	21.6	4.02	0.5	4.07	9.99	0.85
Nov.....	33.0	40.9	25.0	68.0	- 3.0	15.9	3.17	9.0	4.07	6.47	0.96
Dec.....	19.4	28.2	10.5	58.0	-26.0	17.7	1.56	13.9	3.45	6.42	1.18
Year.....	40.4	51.0	29.8	96.0	-35.0	21.2	32.94	135.0	46.44	54.62	35.02

# TEMPERATURE AND PRECIPITATION

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## 2. Normal Temperature and Precipitation at Selected Canadian Stations—concluded.

YARMOUTH, N.S.

Observations for 35 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High-est.	Low-est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	30.0	34.3	19.6	54.0	- 6.0	14.7	2.75	20.3	4.78	0.92	1.97
Feb.....	25.7	32.7	18.8	52.0	-12.0	13.9	2.13	21.8	4.31	7.77	2.28
Mar.....	31.8	37.8	25.7	55.0	- 2.0	12.1	3.32	13.3	4.65	10.75	1.45
April.....	39.7	46.4	33.1	72.0	17.0	13.3	3.17	5.5	3.72	7.12	0.82
May.....	48.1	55.6	40.6	73.0	25.0	15.0	3.77	8	3.77	7.66	0.93
June.....	55.3	63.0	47.6	79.0	31.0	15.4	2.83	-	2.83	6.68	0.69
July.....	60.8	68.2	53.2	86.0	41.0	15.0	3.38	-	3.38	8.42	0.52
Aug.....	60.7	67.9	53.6	83.0	39.0	14.3	3.51	-	3.51	9.59	1.08
Sept.....	56.0	63.2	48.8	79.0	31.0	14.4	3.50	-	3.50	5.70	0.88
Oct.....	48.6	55.4	41.7	74.0	25.0	13.7	4.15	0.3	4.18	11.38	0.78
Nov.....	41.8	46.6	37.1	66.0	11.0	9.5	3.77	4.0	4.17	8.56	1.51
Dec.....	31.1	37.6	24.5	58.0	- 3.0	13.3	3.31	14.7	4.78	9.20	1.88
Year.....	44.1	50.7	37.0	86.0	-12.0	13.7	39.59	79.9	47.58	70.90	35.06

CHARLOTTETOWN, P.E.I.

Observations for 30 years.

Months.	Temperature °F.						Precipitation in inches.				
	Mean Daily.	Mean Daily Max.	Mean Daily Min.	High-est.	Low-est.	Mean Daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	19.0	27.0	11.0	52.0	-19.0	16.0	1.46	19.6	3.42	7.62	1.10
Feb.....	18.0	26.0	9.0	49.0	-21.0	17.0	0.86	17.5	2.61	6.37	0.88
Mar.....	27.0	34.0	20.0	54.0	-15.0	14.0	1.67	13.9	3.06	5.54	1.48
April.....	37.0	44.0	30.0	74.0	8.0	14.0	2.11	8.8	2.99	6.10	0.82
May.....	48.0	56.0	40.0	81.0	26.0	16.0	2.51	1.0	2.61	5.85	0.40
June.....	57.0	66.0	49.0	87.0	32.0	17.0	2.54	-	2.54	5.37	0.47
July.....	66.0	74.0	58.0	91.0	37.0	12.0	2.96	-	2.96	8.97	1.81
Aug.....	65.0	73.0	57.0	92.0	42.0	16.0	3.37	-	3.37	8.44	0.94
Sept.....	58.0	65.0	50.0	87.0	34.0	15.0	3.36	-	3.36	8.75	0.06
Oct.....	48.0	54.0	41.0	77.0	26.0	13.0	4.46	0.2	4.48	10.38	0.50
Nov.....	37.0	42.0	32.0	62.0	11.0	10.0	3.48	6.0	4.08	8.00	1.74
Dec.....	25.0	32.0	19.0	52.0	-11.0	13.0	2.19	16.0	3.79	7.25	1.41
Year.....	42.0	49.0	35.0	92.0	-21.0	14.0	30.97	83.0	39.27	56.43	32.45

### 3.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations.

(The years indicate the period of observation on which averages are based.)

VICTORIA, B.C.

Months.	Sunshine Average 1895-1910.		Average No. of days com- pletely clouded, 1901-1920.	Wind 1896-1915.						Average No. of days 1896-1915 with		
	Number of hours per month.	Percentage of possible duration.		Average number of Gales.	Average hourly velocity.	Prevailing direc- tion.	Strongest Wind Recorded.		Thun- der.	Fog.	Hail.	
							Miles per hour.	Direction.				
Jan.....	53.4	19.6	14	3	9.0	N	50	SE	-	1	-	
Feb.....	79.4	27.9	7	2	8.9	N	48	SW	-	1	-	
Mar.....	143.0	39.0	5	2	9.0	SE	52	SW	-	1	-	
April.....	184.8	44.9	2	2	9.0	SW	50	SW	-	-	-	
May.....	198.6	41.9	3	2	8.8	SW	41	W	-	1	-	
June.....	215.1	44.7	1	2	9.7	SW	49	SW	-	-	-	
July.....	293.7	60.4	1	2	9.1	SW	44	SW	-	-	-	
Aug.....	256.9	58.0	1	1	7.8	SW	43	SW	-	2	-	
Sept.....	183.3	48.6	3	1	6.5	SW	44	SW	-	3	-	
Oct.....	118.3	35.3	7	1	6.8	E	56	SW	-	4	-	
Nov.....	57.3	20.8	10	3	9.9	NE	57	SE	-	1	-	
Dec.....	38.1	14.9	13	3	8.8	NE	59	SE	-	1	-	
Year.....	1,821.9	-	67	24	8.6	SW	59	SE	-	15	-	

\*VANCOUVER, B.C.

Jan.....	46.4	17.3	17	Average less than one per month	4.3	E	40	NW	-	3	-
Feb.....	51.5	18.2	10		4.0	E	26	W	-	4	-
Mar.....	135.6	36.9	7		5.0	E	30	SE	-	1	-
April.....	179.4	43.7	4		4.8	SE	25	W	-	-	1
May.....	220.0	46.5	3		4.8	SE	23	W	1	-	-
June.....	228.0	47.2	2		4.5	E	27	W	1	-	-
July.....	265.6	54.6	2		4.1	S	22	W	2	-	-
Aug.....	252.7	57.0	2		3.7	S	20	W	1	-	-
Sept.....	162.9	43.3	5		4.6	S	26	NW	1	2	-
Oct.....	111.3	33.4	8		3.8	SE	35	W	-	6	-
Nov.....	51.1	18.6	13		4.3	E	25	NW	-	4	-
Dec.....	38.8	15.3	15		4.4	E	30	W	-	4	-
Year.....	1,743.3	-	88	-	4.4	SE	40	NW	6	24	1

\*Sunshine, 1908-1917; days clouded, 1909-1920; wind, days with thunder, etc., 1905-1920.

†KAMLOOPS, B.C.

Jan.....	65.0	24.7	12	Average less than one per month	3.5	S	25	SE	-	-	-
Feb.....	87.0	31.1	7		3.1	S	24	NE	-	-	-
Mar.....	166.0	45.2	4		4.5	SE	31	W	-	-	-
April.....	187.0	45.2	3		4.8	S	30	W	-	-	-
May.....	224.0	46.8	3		4.4	S	30	W	-	-	-
June.....	240.0	50.1	3		4.1	SW	25	SE	-	-	-
July.....	295.0	59.9	1		4.1	SW	40	SE	1	-	-
Aug.....	262.0	58.6	2		3.5	SW	30	SE	-	-	-
Sept.....	185.0	49.1	3		3.5	S	40	S	-	-	-
Oct.....	140.0	42.3	6		3.6	SE	40	NW	-	-	-
Nov.....	70.0	26.2	10		4.4	SE	40	W	-	-	-
Dec.....	50.0	20.1	13		3.3	S	30	SE	-	-	-
Year.....	1,971.0	-	67	-	3.9	S	40	Several.	1	-	-

†Sunshine, 1906-1916; days clouded, 1906-1920; wind, etc., 1897-1916.

‡EDMONTON, ALTA.

Jan.....	79	31.6	10	-	4.4	W	36	W	-	-	-
Feb.....	125	45.7	3	-	4.9	W	34	NW	-	-	-
Mar.....	174	47.4	3	-	5.6	S	28	NW	-	-	-
April.....	212	50.7	3	-	7.2	SW	42	NW	-	-	-
May.....	222	45.1	3	1	6.8	SW	36	SE	1	1	-
June.....	242	47.8	3	-	5.9	W	34	NW	3	1	-
July.....	273	53.8	2	-	5.3	SW	30	NW	4	1	1
Aug.....	256	56.3	2	-	4.7	W	26	NW	2	1	-
Sept.....	184	48.6	3	-	5.3	W	36	W	1	1	-
Oct.....	150	46.2	4	-	5.2	W	28	NW	-	-	-
Nov.....	87	33.9	7	-	4.6	SW	25	NW	-	-	-
Dec.....	77	33.2	11	-	4.2	SW	34	NW	-	-	-
Year.....	2,081	-	54	1	5.3	SW	42	NW	11	5	1

‡Sunshine, 1906-1916; days clouded, 1906-1920; wind, etc., 1897-1916.

3.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—continued.  
(The years indicate the period of observation on which averages are based.)

## MEDICINE HAT, ALTA.

Months.	Sunshine Average 1906-1916.		Average No. of days com- pletely clouded, 1901-1920.	Wind 1896-1915.				Average No. of days 1896-1915 with		
	Number of hours per month.	Percentage of possible duration.		Average number of Gales.	Average hourly velocity.	Prevailing direc- tion.	Strongest Wind Recorded.	Thun- der.	Fog.	Hail.
							Miles per hour.	Direction.		
Jan.	88	33.1	8	2	5.9	SW	46	S	-	-
Feb.	117	41.6	6	2	6.0	SW	51	S	-	-
Mar.	169	46.0	3	2	6.6	SW	41	S, NW	-	-
April.	220	53.4	2	3	7.4	W	50	S	-	-
May.	233	48.9	3	2	7.5	W	60	N, W	-	-
June.	268	55.0	1	2	7.5	SW	61	SW	2	-
July.	326	66.6	1	1	6.4	SW	46	SW	4	-
Aug.	284	63.8	1	1	5.6	SW	50	W	3	-
Sept.	196	52.0	3	1	5.8	SW	50	S	1	-
Oct.	158	47.7	4	1	5.9	W	60	W	-	-
Nov.	102	37.8	6	2	6.1	SW	60	SW	-	-
Dec.	82	32.9	9	2	6.5	SW	60	N	-	-
Year.	2,243	-	47	21	6.4	SW	61	SW	14	1

## \*ROSTHERN, SASK.

Jan.	91.6	36.1	10
Feb.	137.7	50.0	4
Mar.	176.1	47.9	4
April.	220.8	53.6	3
May.	262.7	53.8	2
June.	280.1	56.0	2
July.	294.8	65.2	2
Aug.	272.9	60.3	2
Sept.	190.8	50.4	4
Oct.	141.4	43.3	6
Nov.	111.6	43.1	7
Dec.	78.3	33.0	11
Year.	2,258.8	-	57

## \*PRINCE ALBERT, SASK.

Jan.	26	NW	-	-	-
Feb.	29	NW	-	-	-
Mar.	35	NW	-	-	-
April.	36	NW	-	-	-
May.	25	SE	-	-	-
June.	31	N	1	-	-
July.	31	SE	3	1	-
Aug.	24	E	2	1	-
Sept.	24	Several.	-	1	-
Oct.	28	NW	-	-	-
Nov.	20	Several.	-	-	-
Dec.	32	N	-	-	-
Year.	36	NW	6	3	-

\*Sunshine and days clouded, 1911-1920; wind 1896-1917, 1898 missing; days with thunder, etc., 1896-1917.

## \*INDIAN HEAD, SASK.

Jan.	81.4	32.8	10
Feb.	103.7	37.0	6
Mar.	131.8	35.9	6
April.	170.1	41.2	4
May.	214.4	44.6	5
June.	207.4	42.4	4
July.	272.4	55.5	2
Aug.	228.9	51.3	2
Sept.	162.8	43.2	5
Oct.	130.5	39.5	6
Nov.	68.8	25.7	8
Dec.	58.8	23.8	12
Year.	1,831.0	-	70

## \*QU'APPELLE, SASK.

Jan.	66	NW	-	1	-
Feb.	46	W	-	1	-
Mar.	48	NW	-	1	-
April.	58	S	-	1	-
May.	50	NW	2	1	-
June.	48	SW	4	1	-
July.	38	NW	5	1	-
Aug.	41	SW, NW	4	1	-
Sept.	45	SW	1	1	-
Oct.	45	NW	-	1	-
Nov.	42	NW	-	1	-
Dec.	45	NW	-	1	-
Year.	66	NW	16	12	1

\*Sunshine and days clouded, 1891-1910; wind, etc., 1897-1917 (1908 missing).

## †WINNIPEG, MANITOBA.

Jan.	110.3	41.4	9	7	12.8	W	50	N, W	-	-
Feb.	138.6	49.2	6	5	12.2	SW	55	NW	-	-
Mar.	175.0	47.7	7	6	13.1	S	66	NW	-	1
April.	206.7	50.2	5	7	14.5	E	60	W	1	-
May.	250.7	52.3	4	6	14.5	E	68	NW	2	-
June.	250.4	51.6	3	5	12.7	E	46	NW	4	-
July.	290.5	59.5	2	5	12.1	S	55	SW	5	-
Aug.	256.7	57.8	3	4	11.3	S	43	W	3	-
Sept.	179.6	47.7	4	6	13.0	S	55	W	2	-
Oct.	124.8	37.6	8	6	13.8	S	60	NW	1	-
Nov.	89.6	33.2	10	5	12.4	SW	45	N, W	-	1
Dec.	81.2	32.2	14	4	12.2	SW	59	W	-	-
Year.	2,154.1	-	75	66	12.9	S	66	NW	18	2

†Sunshine, 1882-1910; days clouded, 1901-1920; wind, etc., 1897-1915.



## 3.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—continued.

(The years indicate the period of observation on which averages are based.)

## CALGARY, ALTA.

Months.	Wind (1897-1916).					Average Number of days (1897-1916) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	1	6.4	W	52	NW	-	-	-
February.....	1	6.6	W	48	W	-	-	-
March.....	1	7.6	SW	48	SW	-	-	-
April.....	1	8.5	W	56	NW	-	-	-
May.....	1	8.8	NW	48	N, NW	1	-	-
June.....	1	8.6	NW	50	W	1	-	1
July.....	1	7.6	NW	48	NW	3	-	-
August.....	1	7.3	NW	36	W	2	-	-
September.....	1	7.5	NW	62	NW	-	-	-
October.....	1	6.5	NW	40	W	-	-	-
November.....	1	6.0	W	36	Several.	-	-	-
December.....	1	6.5	W	52	W	-	-	-
Year.....	12	7.3	W	62	NW	7	-	1

## LE PAS, MANITOBA.

Months.	Wind (1910-1920).					Average Number of days (1910-1920) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	1	7.5	W	43	NW	-	-	-
February.....	1	7.2	W	40	W	-	-	-
March.....	1	7.5	S	45	W	-	1	-
April.....	-	8.3	E	41	SW	-	-	-
May.....	-	8.5	E	40	-	-	-	-
June.....	2	7.8	SE	44	SW	2	-	-
July.....	1	8.9	W	54	SW	-	2	-
August.....	1	7.7	W	48	NW	2	1	-
September.....	1	6.8	W	41	NW	-	1	-
October.....	1	7.5	W	42	W	-	-	-
November.....	-	7.9	W	33	NW	-	-	-
December.....	-	7.1	SW	38	W	-	-	-
Year.....	9	7.7	W	54	SW	4	5	-

3. Averages of Sunshine, Wind and Weather at Selected Canadian Stations—continued.  
(The years indicate the period of observation on which averages are based)

PORT NELSON, MAN.

Months.	Wind (1916-1920).					Average Number of days (1916-1920) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	2	12.4	W	34	W, NW	—	1	—
February.....	3	12.9	W	48	NW	—	—	—
March.....	3	11.4	W	41	NE	—	1	—
April.....	2	12.8	SE	51	NW	—	1	—
May.....	1	12.4	NE	40	NE	—	3	—
June.....	3	13.6	NE	38	NE, NW	3	2	—
July.....	2	13.8	NE	53	NE	3	1	—
August.....	2	12.4	SW	42	NE, NW	2	2	—
September.....	3	12.8	SW	42	SW, NW	1	1	—
October.....	4	13.6	NW	40	—	—	1	—
November.....	5	13.1	NW	43	N	—	2	—
December.....	2	11.7	W	42	NW	—	—	—
Year.....	32	12.7	SW	53	NE	9	15	—

PORT ARTHUR, ONT.

Months.	Wind (1896-1920).					Average Number of days (1896-1920) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	1	6.9	NW	37	NW	—	—	—
February.....	1	7.1	NW	50	NW	—	—	—
March.....	1	7.8	NW	52	NW	—	—	—
April.....	1	7.8	S	39	NW, NE	1	1	—
May.....	1	7.8	SE	41	NE	1	2	—
June.....	—	6.7	E	51	NW	2	2	—
July.....	—	6.4	S	34	NW	4	1	—
August.....	—	6.7	SW	41	NW	3	2	—
September.....	—	7.1	SW	62	NW	2	2	—
October.....	1	7.4	SW	42	NW	1	3	—
November.....	1	8.1	NW	40	NW	—	1	—
December.....	1	7.4	NW	52	NW	—	1	—
Year.....	8	7.3	SW	62	NW	14	15	—

WHITE RIVER, ONT.

Months.	Wind (1896-1920).					Average Number of days (1896-1920) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	—	4.2	SE	28	NW	—	—	—
February.....	—	3.3	E	22	S, NW	—	—	—
March.....	—	4.4	E	30	N	—	—	—
April.....	—	5.0	E	30	N	—	—	—
May.....	—	5.6	SE	28	SW	1	—	—
June.....	—	5.0	S	32	SW	1	—	—
July.....	—	4.4	SW	23	N	2	1	—
August.....	—	3.6	S	24	SW	2	1	—
September.....	—	3.9	SW	24	S	2	1	—
October.....	—	4.1	SE	25	SW	—	—	—
November.....	—	4.6	SE	25	NW, SW	—	—	—
December.....	—	3.7	S	24	S	—	—	—
Year.....	—	4.3	SE	32	SW	8	3	—

## 3.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—continued

(The years indicate the period of observation on which averages are based.)

## COCHRANE, ONT.

Months.	Wind (1911-1920).					Average Number of days (1911-1920) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	-	7.8	W	34	NW	-	-	-
February.....	-	7.2	NW	32	NW	-	-	-
March.....	-	8.2	SW	33	NW	-	-	-
April.....	-	8.4	SE	35	NW	-	-	-
May.....	-	8.5	S	35	NW	1	1	-
June.....	-	8.4	S	34	SW	2	-	-
July.....	-	7.1	W	29	SW	3	-	-
August.....	-	6.5	W	31	NW	2	-	-
September.....	-	7.3	SW	30	SW	1	1	-
October.....	-	7.2	SW	35	SE	-	1	-
November.....	-	6.6	SW	30	SW	-	1	-
December.....	-	6.8	NW	27	SW	-	1	-
Year.....	-	7.5	SW	35	NW, SE	9	5	-

## ANNICOSTI, SOUTH WEST POINT, QUEBEC.

Months.	Wind (1897-1920).					Average Number of days (1897-1920) with		
	Average Number of Gales.	Average Hourly Velocity.	Prevailing Direction.	Strongest wind Recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	16	21.9	NW	72	NW	-	-	-
February.....	13	19.9	SW	65	NW	-	1	-
March.....	12	18.6	S	68	NW	-	1	-
April.....	8	15.8	SE	70	NW	-	3	-
May.....	6	13.8	SE	52	NW	-	3	-
June.....	4	13.3	SE	56	W	-	5	-
July.....	3	12.1	SE	44	W	-	7	-
August.....	4	12.3	SE	68	W	-	5	-
September.....	6	14.3	SE	58	NW	-	3	-
October.....	10	16.6	S	67	W	-	4	-
November.....	11	18.8	SE	98	N	-	1	-
December.....	14	20.6	SW	71	NW	-	1	-
Year.....	107	16.5	S	98	N	-	34	-

3.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—continued.  
(The years indicate the period of observation on which averages are based.)

## HAILEYBURY, ONTARIO.

Months.	Sunshine Average 1906-1916.		Average No. of days com- pletely clouded, 1901-1920.	Wind 1896-1920.					Average No. of days 1896-1920 with		
	Number of hours per month.	Percentage of possible duration.		Average No. of Gales.	Average hourly Velocity.	Prevailing direc- tion.	Strongest Wind Recorded.		Thun- der.	Fog.	Hail.
							Miles per hour.	Direction.			
Jan.....	92	33.4	10	1	2	NW	8	N, NW	-	1	-
Feb.....	119	41.6	7	2	2	NW	9	SW	-	1	-
Mar.....	165	44.8	5	2	2	S	9	SW	-	1	-
April.....	193	47.3	5	1	2	S	8	N, NW	-	1	-
May.....	210	45.0	4	1	2	S	8	NW	2	1	-
June.....	259	54.5	2	1	2	SE	8	SW	4	1	-
July.....	266	55.5	1	1	2	SW	8	Several.	6	-	-
Aug.....	221	50.3	2	1	2	S	8	NW	4	1	-
Sept.....	174	46.3	4	2	2	SW	8	S	2	1	-
Oct.....	110	32.8	7	2	2	SW	9	NW	1	1	-
Nov.....	56	20.1	13	2	2	NW	10	SW, W	-	1	-
Dec.....	61	23.2	12	1	2	W	8	NW	-	1	-
Year.....	1,733	-	72	17	2	SW	10	SW, W	19	11	-

*GRAVENHURST, ONTARIO.				*PARRY SOUND, ONTARIO.							
Jan.....	80.7	28.4	12	1	9.4	SE	48	W	-	-	-
Feb.....	126.3	43.4	8	1	9.0	S	49	W	-	-	-
Mar.....	153.0	41.5	7	1	9.1	SW	52	SW	1	-	-
April.....	189.4	46.9	5	1	8.9	S	36	N	1	1	-
May.....	217.2	47.4	5	1	7.9	S	39	SW	2	-	-
June.....	229.8	49.4	2	-	6.8	SW	36	SW	2	-	-
July.....	265.2	56.4	1	-	6.5	SW	36	NW	3	-	-
Aug.....	252.6	58.2	1	-	6.9	S	30	SW, SE	3	-	-
Sept.....	170.6	45.6	4	-	7.4	SW	36	SW	2	-	-
Oct.....	138.5	41.0	7	-	8.7	S	36	SW	2	-	-
Nov.....	85.4	29.9	11	2	10.5	SW	48	SW	-	-	-
Dec.....	61.5	21.5	14	1	9.4	S	37	W, NW	-	-	-
Year.....	1,970.2	-	77	8	8.4	S	52	SW	14	1	-

\*Sunshine, 1902-1910, 1915-1920; wind, etc., 1896-1920.

## †TORONTO, ONT.

Jan.....	77.9	27.0	11	6	13.6	SW	56	NE	-	2	-
Feb.....	108.1	36.7	6	5	13.7	W	56	E	-	1	-
Mar.....	150.0	40.5	6	5	12.8	SW	60	NW	1	1	-
April.....	190.7	47.1	4	3	11.9	SE	50	E	1	1	-
May.....	218.9	47.9	2	2	9.9	SE	54	W	3	1	-
June.....	259.8	56.3	1	1	8.7	SE	35	NE	4	1	-
July.....	282.2	60.4	1	1	8.0	S	36	W, SW	5	1	-
Aug.....	252.7	59.8	1	-	8.0	SW	48	NE	6	-	-
Sept.....	207.8	55.4	2	1	8.8	SE	50	S	3	2	-
Oct.....	149.3	43.8	4	2	9.9	S	53	W	1	2	-
Nov.....	85.3	29.4	8	4	12.2	SW	50	W	-	2	-
Dec.....	65.2	23.5	10	7	13.2	SW	50	SW	-	1	-
Year.....	2,046.9	-	56	37	10.9	S	60	NW	34	15	-

†Sunshine, 1882-1910; days clouded, 1901-1920; wind, etc., 1896-1920.



## 3.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—continued.

(The years indicate the period of observation on which averages are based.)

## WOODSTOCK, ONT.

Months.	Sunshine Average 1882-1911.		Average No. of days com- pletely clouded, 1901-1920.	Wind 1896-1920.					Average No. of days 1896-1920 with		
	Number of hours per month.	Percentage of possible duration.		Average No. of Gales.	Average hourly Velocity.	Prevailing direc- tion.	Strongest Wind Recorded.		Thun- der.	Fog.	Hail.
							Miles per hour.	Direction.			
Jan.....	62.0	21.4	14	4	12.4	SW	57	SW	-	1	-
Feb.....	88.7	30.2	8	4	12.3	W	47	NW	-	1	-
Mar.....	122.6	33.2	9	5	12.2	SW	52	SW	-	1	-
April.....	167.4	41.7	6	4	12.1	SW	48	SW	1	1	-
May.....	206.8	45.6	4	3	10.5	SW	46	SW	2	1	-
June.....	246.1	53.7	2	1	8.9	W	36	E	2	1	-
July.....	275.4	59.4	1	1	8.4	W	36	SW	2	1	-
Aug.....	238.0	55.4	2	1	8.0	SW	40	SW	2	2	-
Sept.....	181.8	48.7	4	1	8.4	W	34	NW	2	1	-
Oct.....	135.7	41.7	6	2	10.5	SW	40	NW	1	2	-
Nov.....	76.4	26.3	10	3	11.9	SW	53	SW	-	2	-
Dec.....	54.1	19.4	15	4	12.4	SW	49	SW	-	1	-
Year.....	1,855.0	-	81	33	10.7	SW	57	SW	12	15	-

## \* MONTREAL, QUE.

Jan.....	76.0	34	12	6	15.5	SW	56	SW	-	1	-
Feb.....	103.4	41	9	7	16.7	SW	66	NW	-	1	-
Mar.....	145.9	45	6	8	16.7	SW	60	SE, SW	-	1	-
April.....	173.7	50	6	4	14.9	S	53	SW	1	1	-
May.....	204.6	51	4	2	12.8	S	49	W	2	-	-
June.....	217.3	50	2	2	11.6	SW	48	SW, NW	3	-	-
July.....	238.4	59	1	1	11.3	W	42	SW	5	-	-
Aug.....	218.6	58	2	-	10.6	SW	36	W	4	-	-
Sept.....	171.5	53	4	1	11.7	SW	38	SE, NW	3	1	-
Oct.....	122.2	41	6	2	12.9	SW	45	NW	1	2	-
Nov.....	68.5	30	11	5	14.6	SW	58	W	-	1	-
Dec.....	60.0	26	14	5	14.0	SW	50	NW	-	1	1
Year.....	1,800.1	-	77	43	13.6	SW	66	NW	19	9	1

\*Days clouded, 1901-1920; wind, etc., 1896-1920.

## † QUEBEC, QUE.

Jan.....	86	31.0	11	9	15.0	SW	62	NE	-	1	-
Feb.....	105	36.5	8	8	16.1	SW	69	NE	-	-	-
Mar.....	152	41.4	7	8	15.3	SW	72	NE	-	1	-
April.....	174	42.5	5	7	14.4	NE	54	NE	1	1	-
May.....	197	42.1	4	6	14.4	NE	52	W	2	-	-
June.....	248	44.6	4	4	13.2	SE	46	NE	4	-	-
July.....	223	46.8	2	2	11.6	S	43	NE, SW	7	-	-
Aug.....	224	48.4	2	1	10.7	SW	39	NE, SW	5	-	-
Sept.....	152	45.2	5	3	11.5	SW	42	NE	2	1	-
Oct.....	123	40.2	8	4	12.4	SW	66	NE	1	2	-
Nov.....	65	24.0	10	5	14.0	SW	58	NE	-	1	-
Dec.....	70	28.8	13	6	13.9	SW	68	NE	-	1	-
Year.....	1,819	-	79	63	13.5	S	72	NE	22	8	-

†Sunshine, 1903-1912; days clouded, 1903-1920; wind, etc., 1896-1920.

## 2.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—concluded.

(The years indicate the period of observation on which averages are based.)

WOLFVILLE, N.S.				YARMOUTH, N.S.							
Months.	Sunshine Average 1895-1910.		Average No. of days com- pletely clouded, 1901-1920.	Wind 1896-1915.					Average No. of days 1896-1915 with		
	Number of hours per month.	Percentage of possible duration.		Average No. of Gales.	Average hourly Velocity.	Prevailing direc- tion.	Strongest Wind Recorded.		Thun- der.	Fog.	Hail.
							Miles per hour.	Direction.			
Jan.....	84.0	29.6	10	4	13.2	NW	53	SW,NW	-	2	-
Feb.....	99.6	34.4	10	4	13.1	NW	60	SW	-	2	-
Mar.....	134.0	36.4	8	4	12.5	SW	60	NW	-	4	-
April.....	147.6	36.6	7	2	11.1	SW	43	NW	-	4	-
May.....	200.8	43.8	5	1	9.9	SW	44	-	1	7	-
June.....	230.0	49.4	2	-	8.6	S	40	SE	2	7	-
July.....	235.6	50.2	2	-	7.7	SW	36	S	2	13	-
Aug.....	232.4	53.6	2	-	6.7	SW	65	SW	2	11	-
Sept.....	182.5	48.6	3	1	8.0	SW	48	W	1	7	-
Oct.....	151.4	44.8	7	2	10.0	S	54	SE	1	4	-
Nov.....	98.9	34.7	8	3	12.0	SW	60	-	-	2	-
Dec.....	67.2	24.8	11	3	12.6	SW	62	SW	-	2	-
Year.....	1,864.0	-	75	24	10.5	SW	65	SW	9	65	-

## \* FREDERICTON, N.B.

Jan.....	110.3	39.2	10	2	8.2	NW	38	SW	-	1	-
Feb.....	124.2	43.1	8	2	9.3	NW	49	NW	-	1	-
Mar.....	154.8	42.0	8	2	9.5	NW	40	NW	-	1	-
April.....	184.6	45.6	7	1	8.2	NW	36	NW	-	2	-
May.....	205.4	44.4	6	1	8.0	SW	37	NW	1	1	-
June.....	217.6	46.4	5	-	7.4	W	34	NW	2	1	-
July.....	236.8	50.2	3	-	6.6	SW	32	NW	3	2	-
Aug.....	223.0	51.2	3	-	6.7	W	28	NW	2	2	-
Sept.....	179.0	47.8	5	-	6.0	NW	30	NW	1	4	-
Oct.....	151.4	44.8	6	1	7.7	W	33	SE, NW	-	3	-
Nov.....	91.3	33.3	11	1	8.1	NW	37	-	-	2	-
Dec.....	94.1	35.9	12	2	8.5	NW	42	NW	-	2	-
Year.....	1,972.5	-	84	12	7.9	W	49	NW	9	22	-

\*Sunshine, 1881-1911; days clouded, 1901-1920; wind, 1896-1920.

## † CHARLOTTETOWN, P.E.I.

Jan.....	89	31.8	13	2	8.8	NW	46	NW	-	-	-
Feb.....	112	38.9	10	1	8.4	SW	55	SE	-	1	-
Mar.....	130	35.3	9	2	8.6	S	41	SW	-	1	-
April.....	153	37.6	9	-	8.4	SE	33	SE	1	1	-
May.....	195	42.1	7	-	8.1	S	32	NE	1	-	-
June.....	226	48.2	6	-	7.0	S	28	S	2	-	-
July.....	238	50.2	4	-	6.3	SW	32	SW	2	-	-
Aug.....	229	52.4	5	-	6.5	SW	31	SW	2	-	-
Sept.....	179	47.8	6	-	7.2	SW	32	S, NW	1	-	-
Oct.....	114	33.9	11	1	8.2	SW	38	S	-	1	-
Nov.....	73	25.9	13	1	9.1	W	38	NE	-	1	-
Dec.....	60	22.3	17	1	9.0	NW	38	SW	-	-	-
Year.....	1,798	-	110	8	8.0	SW	55	SE	9	5	-

†Sunshine, 1906-1916; days clouded, 1907-1920; wind, etc., 1896-1920.

### VIII.—PRODUCTION.

In this section are included the statistics of agriculture, the fur trade, forestry, fisheries, minerals, manufactures and water powers. A sketch of the development of each of these branches of production is prefixed to the statistical tables.

#### THE DEVELOPMENT OF AGRICULTURE IN CANADA.

By J. H. GRISDALE, D. Sc. A., Deputy Minister of Agriculture,  
Ottawa.

Agriculture in Canada dates back to prehistoric times. When Cartier sailed up the St. Lawrence in 1535 he found fields of maize growing around the Indian village of Hochelaga at the foot of Mount Royal where Montreal now stands. Later travellers reported similar fields in many parts of what is now Ontario. More especially the Huron Indians, who occupied the territory around Georgian Bay and Lake Huron, and were not as warlike as the other tribes, cleared large patches of land and grew corn, peas, beans, and other crops.

*The Beginnings in Acadia and Quebec.*—In the whole area now constituting Canada, the first settlement, and at the same time the first effort at agricultural production made by white men was most probably that begun at Port Royal, now Annapolis, Nova Scotia, by the French under de Monts in 1605. Here some of the settlers cultivated patches of land and grew maize, pumpkins and beans, while cows were brought here by Poutrincourt in 1696. The Indians also grew maize to a small extent to supplement food obtained by hunting. According to the census of 1671, the Acadians, then numbering 441, had 429 arpents under cultivation, together with 866 cattle, 407 sheep and 36 goats. Thereafter the settlers continued to clear the lands and reclaim the fertile marshes from the sea, chiefly along the Basin of Minas, on which hay grew abundantly.

In the valley of the St. Lawrence farming on a small scale appears to have been carried on by Champlain, the founder of Quebec, as early as 1608, when cattle were imported and hay and fodder grown, together with wheat and other grains. In 1626, Champlain established a farm at Cap Tourmente for cattle which he sent from Quebec.

The first real farmer, however, was Louis Hébert, who landed in Quebec in 1617 and immediately began to clear and cultivate the soil on what is now part of Upper Town, Quebec. His only tool was a spade, but he worked away till the soil was ready to receive the seed and also planted some apple trees. Hébert was followed by other farmers, among them Guillaume Couillard, Abraham Martin and Robert Giffard, the latter of whom was said to have had in 1635 large crops of wheat, peas and Indian corn. In the district of Three Rivers, Pierre Boucher had large crops of grains and vegetables, and in 1648, Pierre Gadbois and others commenced farming on land where Montreal now stands.

The land was held under seigneurial or feudal tenure, similar to that prevailing in old France, a system which seems to have promoted the development of agriculture. Many former hunters and traders settled down as cultivators of the soil, and came to be known as "habitants."

In 1667 there were 11,448 arpents of land under cultivation, while the farmers owned 3,107 cattle and 85 sheep. More live stock of all kinds was gradually brought into the country. A census of 1721 gives the following statistics: arpents under cultivation, 62,145; in pasture, 12,203; grain harvested—wheat, 282,700 bushels; barley, 4,585 bushels; oats, 64,035 bushels; peas, 57,400 bushels; corn, 7,205 bushels; flax, 54,650 lbs.; hemp, 2,100 lbs.; tobacco, 48,038 lbs. There were at this time 5,603 horses, 23,288 cattle, 13,823 sheep and 16,250 swine in the colony.

*Quebec.*—During two centuries and a half the habitant varied his system of farming very little. When the land was cleared of trees, wheat and oats were sown among the stumps. Two crops of this nature were harvested and then hay and other grasses were grown for several years. When the stumps were sufficiently rotten, the land was ploughed. Half the land was ploughed in three consecutive years and seeded to cereals and roots; the other half was kept for the production of hay as pasture for live stock. This was changed around during the next three years, and so on. The quantity of live stock kept was small compared with the area of the farm. This was not a very scientific system, but the soil was so rich that the crops of grain, roots and hay were always plentiful, so much so that flour, wheat and peas were being exported in 1749. Butter and cheese were always made, while maple sugar has been one of the regular products since 1690 and potatoes were first grown in 1758.

The period following the English conquest of Quebec, 1760 to 1850, was a critical one for agriculture, the governing classes being too much engrossed in politics to pay much attention to it. However, the settlement of the Eastern Townships was begun in 1774 by the United Empire Loyalists, who brought their cattle with them. These settlers were granted lands which were held under the tenure known as "free and common soccage." These settlements made good progress and were reinforced later on by French-Canadians from the seigneuries.

From a very early period numerous efforts have been made to develop the agriculture of the country by agricultural education or training, by the organization of associations and by the establishment of agricultural schools and colleges. As early as 1668, Monseigneur de Laval opened an industrial school where agriculture was taught at St. Joachim, near Quebec, and in 1789 a society which published pamphlets on agriculture was founded by Lord Dorchester. Later, various books and pamphlets on agriculture were published and agricultural newspapers begun. In 1847 the Canadian legislature passed an Act authorizing the formation of agricultural societies and granting them subventions to be used for prizes at fairs and for



the importation of live stock and seed. In 1852 a law was passed creating the Department of Agriculture, the Board of Agriculture and authorizing the establishment of schools of agriculture and model farms. The first agricultural school in Canada was opened in 1859 at Ste. Anne de la Pocatière, while the Oka Agricultural Institute was opened in 1890 and Macdonald College in 1908.

*Nova Scotia.*—While the territory which is now Nova Scotia became a British possession by the Treaty of Utrecht in 1713, the first English-speaking settlement was made in Halifax in 1749, but for military rather than economic purposes. However, between 1751 and 1753 about 1,615 German and Swiss immigrants had settled in what is now the county of Lunenburg. Further, after the expulsion of the Acadians from Port Royal in 1755, a considerable number of New Englanders had settled in the Annapolis Valley. As early as 1762, 14,340 acres were under cultivation producing hay, grain and potatoes and supporting some live stock. In 1783, after the Peace of Paris, many United Empire Loyalists came to Nova Scotia, bringing their live stock with them. They received from the British Government grants of land, agricultural implements and seed corn.

In the Maritime Provinces generally, the farmers were unprogressive and farming was at a rather low ebb when, in 1818, a series of letters published in the *Acadian Recorder* under the signature of "Agricola," attracted public attention. These letters dealt with all phases of the industry. The people were awakened from their lethargy and the outcome was the formation at the end of 1818 of the Central Agricultural Society of which "Agricola", now found to be John Young, a Scotsman who had come to Nova Scotia a few years previously, became secretary. Twenty-five other agricultural societies were organized within the next two years. Yearly exhibitions were held, improved stock and seed were distributed and conditions improved generally. The agricultural societies were in 1864 put under the control of a Board of Agriculture, and in 1884 under the office of the Secretary for Agriculture.

In 1885 a Chair of Agriculture was established in connection with the Provincial Normal School, and in 1888 the Nova Scotia School of Agriculture was established. In 1893 a School of Horticulture was established at Wolfville and in 1905 the two schools were united as the College of Agriculture at Truro.

*Prince Edward Island.*—The first record of settlement in Prince Edward Island or St. John Island, as it was then called, was in 1713, when some families of Acadians migrated to its shores, bringing a few cattle with them. In 1763 the island was ceded to Great Britain, divided, and granted to persons who had claims on the ground of military service, but practically no attempt was made to cultivate the land. However, farming received a slight impetus on the arrival in 1783 of the United Empire Loyalists, who brought their cattle with them and began to cultivate the land. The country was undulating and the soil a bright red loam very suitable for the growing of cereal crops and potatoes. Rich deposits of mussel mud were found,

which were used as fertilizer with good results. Soon Prince Edward Island oats and potatoes were listed on the markets of the Maritime Provinces.

The agitation in Nova Scotia, caused by the publication of the letters of "Agricola", spread to Prince Edward Island, and in 1827 agricultural societies were formed and exhibitions held. Better methods of farming were adopted and attention was given to horse raising and later to swine and poultry. The first Royal Agricultural Society was organized in 1845, receiving an annual grant of £100 from the government; various branches were established at different places. The Provincial Exhibition, established in 1900, is held annually at Charlottetown, while annual seed fairs also take place.

*New Brunswick.*—As early as 1605 French adventurers ascending the St. John river, noticed fields of Indian corn on the flats along its shores, but the first settlement was made by some fifty Acadians with a few cattle near that river in 1693. When Acadia was ceded to Great Britain in 1713, others moved north from the peninsula of Nova Scotia into New Brunswick, settled in the valleys and devoted themselves to growing corn and hay. The land was very fertile and produced abundant crops.

About 1762 a number of Massachusetts colonists formed a settlement at a place now called Maudgenville; others took the alluvial lands between there and the Jemseg River. In 1784, when a large part of the land belonging to the Acadians was seized by the British and given to the United Empire Loyalists, the Acadians moved to the northern part of the Province and founded the flourishing settlement of Madawaska. The rich soil along the St. John river, when only cleared of the trees and harrowed, produced 20 bushels of corn and 20 bushels of wheat per acre and when properly worked gave much better yields. In 1788 seventy acres of land were sold for £42 3s. 6d., but in the early years of the nineteenth century, land rose rapidly in value. Large quantities of hay, roots and vegetables of all kinds, as well as beef and mutton, were marketed at St. John.

The period between 1840 and 1845 was a prosperous one for farming in New Brunswick; the crops were abundant, much land was brought into cultivation and the people were contented. However, at the close of this period there was a great change, brought about by various causes. Farming conditions were such that few cared to embark in this industry and in 1849 James F. W. Johnston of Great Britain was asked to investigate the agricultural situation. His report was most favourable. Many fine farms of 100 to 200 acres of cleared land were found throughout the province, yielding large crops of grain, potatoes, etc. Average yields in the county of Northumberland, in 1850, per acre, were—wheat, 17 bushels; oats, 32 bushels; maize, 50 bushels; barley, 32 bushels; turnips, 350 bushels; potatoes, 200 bushels; hay, 2 tons. Three crops were grown without manure and sometimes as many as eight. Land was valued at from £3 to £15 per acre. Mr. Johnston suggested ways and means for developing the industry which proved beneficial in later years. On

his advice a New Brunswick Agricultural Society was founded in 1851. Its work was taken over by a provincial board of agriculture in 1855, which in turn was replaced by a central provincial farmers' association in 1876. The portfolio of Commissioner of Agriculture was created in 1898.

The first Agricultural Society in New Brunswick was organized in St. John, N.B., in 1790. Soon others were established throughout the Province. Better agricultural methods were introduced and conditions improved. In 1825 the Board of Agriculture made the first importation into Canada of pure-bred shorthorns, thus laying the foundation for the fine stock found in the County of Westmoreland and other sections.

*Ontario.*—Agriculture in Ontario may be said to have been begun in 1671, when Frontenac founded the first settlement near Kingston. He was granted a vast territory on the understanding that he would foster agriculture and stock raising, but little agricultural work was actually done, as all of the settlers' time was taken up in warring with the Indians. In 1701, a small settlement on the Detroit River was started by La Motte Cadillac, who is said to have brought some cows with him.

The first English-speaking agricultural settlement was not commenced until 1783, when the United Empire Loyalists arrived from the United States. They settled principally around Niagara, York, Western Ontario and the Bay of Quinte, the settlements along the Bay of Quinte and the St. Lawrence River being among the most populous. Townships were surveyed and grants of land given. As these exiled settlers were very poor owing to the confiscation of their property, they had to be provided with rations, clothes, implements, seed grain, etc. A cow was allotted to every two families and other articles divided among them. The implements supplied them were very crude, but by combining their efforts they were able to clear open spaces in the forests, build rude huts and sow the seed among the stumps. The crops of wheat, corn, etc., grown on this virgin soil gave excellent yields for the first three years, but the crop of 1788 was a failure. During these years, flour mills were built at Cataraqui River, Napanee, Matilda, Niagara Falls, Fort Erie and Grand River. The pioneers had many hardships to contend with, not the least being the depredations of the Indians and wild beasts. Later, during the Crimean war, the price of wheat rose from 30 cents to \$2 per bushel, which, followed by the high prices obtaining during the American Civil War, gave many of the farmers their first real start, enabling them to bring in cattle, horses and sheep from Lower Canada and the United States.

The building of roads, under an Act of 1793, opened up the country, and soon grain, especially corn, was being exported. Cheese and butter were made, and a market was opened at Kingston in 1801. Wheat was the leading cereal produced, the valley of the Thames being noted for the quantity and quality of its wheat. After the war of 1812, grants of 100 acres with provisions and implements



were made to the soldiers. Legislation was passed to encourage the growing of hemp, but little success was obtained in the handling of this crop. According to the census of 1817, the Midland districts of Ontario contained 3,600 horses, 100 oxen, 6,185 cows and 1,654 young cattle.

From a comparatively early period local agricultural societies have been a feature of agriculture in Ontario, some half dozen such societies being organized between 1820 and 1830, in which year the legislature of Upper Canada provided a grant of £100 for a society in each district on condition that the members of the society subscribed and paid in at least £50. In the period from 1830 to 1845 pure-bred cattle were imported, and the foundations of the live stock industry laid. In 1846 were organized the Provincial Agricultural Association and Board of Agriculture for Canada West, and the first provincial exhibition was held in Toronto in that year, followed by annual exhibitions in other cities. These exhibitions promoted the wider use of the labour-saving agricultural machinery which was now being manufactured. In 1859 the Ontario Fruit-Growers' Association was established at Hamilton and in 1862 a veterinary college (now the Ontario Veterinary College) was established in Toronto, while the Ontario Agricultural College was founded at Guelph in 1874.

In 1880 the Ontario Agricultural Commission was appointed to inquire into the agricultural resources of the Province of Ontario, the progress and condition of agriculture, and other related matters. As a result of its report, the Ontario Bureau of Industries was formed in 1882, for the collection and publication of statistics of agriculture and allied industries. Finally, a Department of Agriculture was created in 1888, the activities of which have steadily increased down to the present time.

*Manitoba.*—The earliest attempts at cultivation in Manitoba and the West date from the arrival of the Selkirk settlers at the Red River in 1812. The twenty-two men who composed the settlement immediately commenced to break the land, which was sown with winter wheat. The wheat crops of 1813 and 1814 were complete failures owing both to lack of knowledge and to the only implement available for breaking the sod being the hoe. The yield of potatoes and turnips was, however, good, and the crop of 1815 was a success.

During the first few years of the settlement, there was great rivalry between the North-West Company and the Hudson's Bay Company, which ended in bloodshed in 1816. Many of the settlers were killed and the remainder fled up Lake Winnipeg to Jack River. Early in 1817 a relief force was sent by Lord Selkirk, Fort Douglas was recaptured and the settlers were persuaded to return and resume farming. Misfortune, however, seemed to follow the efforts of this colony, its crops being wiped out by grasshoppers in 1818 and 1819. As the supply of seed was exhausted, some of the settlers went south to Wisconsin and, after much hard labour, returned with 250 bushels of seed. Small crops followed and the people were only saved from suffering and want by the generosity of Lord Selkirk.



In 1822, the population was 681; the numbers of live stock were—cattle, 48; calves, 39; oxen, 6; sheep, 10; pigs, 12; horses, 78. The quantities of seed sown: wheat, 235 bushels; barley, 142; Indian corn, 12; potatoes, 570. The first satisfactory crop of grain was reaped in 1824, wheat yielding 44 bushels from the plow and 68 bushels after the hoe. It was gathered with the sickle and threshed with the flail. The crops varied during succeeding years, but by 1830 the colony was in a flourishing condition.

For more than half a century, however, Manitoba remained an isolated community, the first railway reaching St. Boniface, opposite Winnipeg, only in 1878, and the Canadian Pacific shortly afterwards. The farmers of Manitoba thus secured a market for surplus products and agriculture flourished apace. While the production of such hardy varieties of wheat as Red Fife and Marquis has added greatly to the area in which wheat can profitably be grown, recent years have seen a great increase in mixed farming. The Manitoba Agricultural College was founded in 1903.

*Saskatchewan.*—In what is now Saskatchewan the Hudson's Bay Company had in the early days trading-posts at Carlton, Prince Albert and Battleford; about these posts the settlers grew vegetables, barley, oats and wheat. Two flour mills were erected, but the market for the flour was purely local. In the seventies the Indians were placed on reserves, taught agricultural methods and given horses and cattle, many of them making good progress.

About 1882, settlers from Eastern Canada and the British Isles began to settle in the eastern part of what is now the province of Saskatchewan while the building of the Canadian Pacific Railway brought in more settlers in 1883. These new settlers knew little about producing crops under semi-arid conditions, and the soil and climatic conditions of the country formed problems which were hard to solve. They kept a little stock, a few cows, hens and pigs, worked hard and, on the whole, were blessed with good crops.

The Riel Rebellion in 1885 interfered considerably with farming operations. Many of the farmers hired their horses to the Government for transporting supplies, and were thus unable to work their land. A few farmers, after finishing seeding, ploughed the land in June and July and kept working it in order to check the weeds. The next year was dry and although most crops failed these farmers had over 23 bushels to the acre on their summer-fallowed land. The problem of conserving the moisture in the soil was solved, and the principle of summer-fallow remains the best for successful crop growing. The establishment of the Experimental Farm at Indian Head, in 1888, assisted greatly in the proper development of agriculture in the province.

While the majority were engaged in growing wheat, a number of the earliest settlers chose the raising of live stock as their work. Horse and cattle ranches were established in the Qu'Appelle Valley, Moose Mountain, Cypress Hills, etc., and sheep ranches around

Swift Current, Maple Creek, etc. The excellent pastures and the abundant supply of water made the country especially adapted to stock raising. With the increase in population and the development of the grain-growing industry, the rancher has been obliged to seek the rougher parts of the province for his ranges. A large number of the farmers are now devoting themselves to mixed farming, which appears to be gaining in popularity, especially in the older districts.

*Alberta.*—In what is now the province of Alberta agriculture was carried on in a small way as early as 1899 at the trading posts of the Hudson's Bay Company, where wonderful crops of vegetables and field crops were grown. In the seventies cattle were brought in from Montana to the Macleod district, becoming the nucleus of the great Alberta ranches.

Alberta is divided into three sections, the Peace River, central and southern. The Peace River or northern section was first settled by the Hudson's Bay Company, which later at its various forts and mission stations grew potatoes, beets and all sorts of garden truck. The soil is a rich dark loam, well supplied with the plant foods most needed and the wheat produced is of the best quality. Very many varieties of grasses abound and these make excellent pasture, the chinook making this grass available throughout the year. The central section is more of a mixed farming country. In this section most of the dairy and live stock enterprises of the province are found. All sorts of grain crops do well. The southern part of the province was originally a ranching country for cattle, horses and sheep. This has been considerably changed through the introduction of irrigation enterprises, a great diversity of crops such as grains, forage and roots being grown, and the yields are exceptionally large. A large quantity of grain hay is grown. The whole province is being turned into a mixed farming country, and while the large horse-and-cattle ranges are gradually disappearing, the farmers of the present day are raising a better class of stock.

*British Columbia.*—Daniel Williams Harmon was the first farmer in British Columbia, settling in the Fraser Lake district. Entries in his diary show that in 1811, 1815 and other years, he planted potatoes, vegetables and barley and that the yields were large, one bushel of potatoes producing forty-one, and five quarts of barley sown yielding five bushels. For many years fine crops were grown in this district and at the posts of the Hudson's Bay Company, which, together with the North-West Company, was the pioneer in agriculture in British Columbia. In 1837 the Hudson's Bay Company had a large farm near Fort Vancouver, producing grain, vegetables and other crops and carrying all kinds of live stock. They had large farms at Nisqually and Cowlitz and smaller ones on Vancouver island, Dr. John McLoughlin being one of the great promoters of agriculture. With the gold rush to the Cariboo in the 50's, and the springing up of mining camps, an impetus was given to farming in order to supply produce to these camps. This was the beginning of stock raising in the valleys of the

Thompson and Nicola. Later many of the miners turned to farming and stock raising.

In what is now British Columbia agricultural societies were formed and exhibitions held at a very early date in the history of the colony. The first agricultural association was formed at Victoria in 1861 and its first exhibition was held in the same year, while on the mainland the first exhibition was held at New Westminster in 1867. Later, under the provisions of the Farmers' Institutes and Co-operation Act of 1897, a number of Farmers' Institutes were formed, with a Farmers' Central Institute having annual meetings.

### AGRICULTURE.

**Field Crops, 1916-21.**—In Table 1 are presented for Canada, by provinces, estimates of the area, yield, quality and value of the principal field crops for each of the six years 1916 to 1921, with the five-year averages for the period 1916 to 1920. The estimates of 1921 are based upon statistics collected from about 160,000 farmers throughout Canada in June of that year under arrangements made between the Dominion and Provincial Governments in accordance with plans dating from 1917 for the four provinces of Quebec, Saskatchewan, Alberta and British Columbia, and from 1918 for the remaining five provinces of Prince Edward Island, Nova Scotia, New Brunswick, Ontario and Manitoba. As was pointed out in previous editions of the Year Book (see 1920 edition, p. 188), comparability with the statistics of 1917 and 1918 was somewhat affected by the change in the method of estimation which then took place. In preparing the estimates of totals for the year 1921, partial use was made of preliminary census data showing the total number of farms in Canada. The effect was to increase considerably the areas estimated to be sown to wheat in 1921, as compared with the final estimate of 1920, the difference being partly due to actual increase and partly to correction by use of the census data<sup>1</sup>. The estimates for 1920 and 1921 are subject to final revision according to the results of the census of 1921, when available.

**Season of 1920-21.**—The winter of 1920-21 proved to be exceptionally mild, as a consequence of which the loss of potatoes through freezing and rotting in cellars was reduced to a minimum. The percentage of fall-sown wheat that was winter-killed was, however, higher than in either of the two previous seasons when the winters were more severe, the proportions for all Canada being 10 p.c. in 1921 as against 4 p.c. in 1920 and 5 p.c. in 1919. The summer of 1921 will be remembered for the extraordinary and prolonged drought, which prevailed in most countries of the northern hemisphere. Notwithstanding this, however, Great Britain and France produced excellent wheat crops, with average yields per acre the highest on record in both countries. In Canada the wheat crop on the whole proved fair, although the yield per acre for the Dominion was less than

<sup>1</sup>For more detailed explanation, see Monthly Bulletin of Agricultural Statistics for November, 1921 (Vol. 14, No. 159, p. 431).



in 1920 and was below the decennial average. Threatened disaster, due to the prevailing drought, was averted by heavy rains which fell over most of the province of Saskatchewan in June, giving abundant moisture when most needed. In September, when fine weather is usual, heavy rains in the same province, whilst the grain was in stook, delayed threshing and lowered both yield and grade; but the average turned out to be superior to that of 1920 by  $2\frac{1}{2}$  bushels per acre and the total yield of wheat for Saskatchewan, as finally estimated, was 188 million bushels, as compared with 113,135,000 bushels in 1920, and it is the highest total for Saskatchewan since 1915. In most of the provinces the grain yield was seriously affected by the drought, whilst the average yield per acre of hay and clover for Canada, only slightly over one ton, was the lowest on record. As usual during a hot season, corn proved exceptionally fine, and wherever ensilage is practised farmers were able to fill their silos with fodder corn, which compensated largely for the scarcity of hay. Fortunately the drought was broken during September in time for the rains to prove of some benefit to late potatoes, to root crops and to pastures upon which, owing to the absence of frost, cattle were able to graze up to a later date than usual.

**Areas and Yields of Grain Crops.**—The total yield of wheat in Canada for the year 1921 was finally estimated at 300,858,100 bushels from a sown area of 23,261,224 acres, as compared with 263,189,300 bushels from 18,232,374 acres in 1920 and with 228,409,780 bushels from 16,967,561 acres, the annual average for the five years 1916-20. The total for 1921 consisted of 15,520,200 bushels from 720,635 harvested acres of fall wheat and of 285,337,900 bushels from 22,540,589 sown acres of spring wheat. The average yield per acre for all wheat in Canada was 13 bushels for 1921, as against  $14\frac{1}{2}$  bushels in 1920 and  $13\frac{1}{2}$  bushels, the five-year average. The average yield per acre for fall wheat in 1921 was  $21\frac{1}{2}$  bushels and of spring wheat  $12\frac{3}{4}$  bushels. For oats, the finally estimated total yield in 1921 was 426,232,900 bushels from 16,949,029 acres, as compared with 530,709,700 bushels from 15,849,928 acres in 1920 and with 432,926,000 bushels from 13,980,453 acres, the five-year average. The average yield per acre was  $25\frac{1}{4}$  bushels in 1921, as against  $33\frac{1}{2}$  bushels in 1920 and 31 bushels, the five-year average. Barley yielded a total of 59,709,100 bushels from 2,795,665 acres, as compared with 63,310,550 bushels from 2,551,919 acres in 1920 and with 58,962,988 bushels from 2,509,267 acres, the five-year average. The average yields per acre were  $21\frac{1}{4}$  bushels in 1921,  $24\frac{3}{4}$  bushels in 1920 and  $23\frac{1}{2}$  bushels the five-year average. Flaxseed gave a total yield of 4,111,800 bushels from 533,147 acres, as compared with 7,997,700 bushels from 1,428,164 acres in 1920 and with 6,744,080 bushels from 1,033,336 acres, the five-year average. The yield per acre was  $7\frac{3}{4}$  bushels, as compared with 5.60 bushels in 1920, and with 6.55 bushels, the average. For the remaining crops the total yields for 1921 were in bushels as follows, the corresponding totals for 1920 and for the five-year average being given within brackets: rye 21,455,260 (11,306,400;



7,350,360); peas 2,769,981 (3,528,100; 3,298,448); beans 1,089,900 (1,265,300; 1,580,776); buckwheat 8,230,100 (8,994,700; 8,809,280); mixed grains 22,271,500 (32,420,700; 24,535,316); and corn for husking 14,904,000 (14,334,800; 11,905,040).

**Root and Fodder Crops.**—The final estimate of the production of potatoes was 107,346,000 bushels from 701,912 acres, as compared with 133,831,400 bushels from 784,544 acres in 1920 and with 101,388,300 bushels from 693,690 acres, the five-year average. The yield per acre was  $152\frac{3}{4}$  bushels for 1921, as against  $170\frac{1}{2}$  bushels in 1920 and 146.15 bushels, the average. Turnips, mangolds, etc. produced a total of 79,150,300 bushels from 227,675 acres, as compared with 116,390,900 bushels from 290,286 acres in 1920 and with 90,350,220 bushels from 258,538 acres, the five-year average. The yield per acre was  $347\frac{3}{4}$  bushels, as against 401 bushels in 1920 and  $349\frac{1}{2}$  bushels, the average. Sugar beets produced 268,000 tons from 28,367 acres, as against 412,400 tons from 36,288 acres in 1920 and 204,200 tons from 21,558 acres, the average. The yield per acre was 9.45 tons in 1921, as compared with 11.37 tons in 1920 and with 9.45 tons, the average.

The total yield of hay and clover was 11,366,100 tons from 10,614,951 acres, as compared with 13,338,700 tons from 10,379,292 acres in 1920 and with 14,534,140 tons from 9,513,118 acres, the five-year average. The yield per acre in 1921 was 1.07 ton, as compared with 1.30 ton in 1920 and with 1.55 ton, the five-year average. The average yield per acre for 1921 was the lowest on record. Grain hay in British Columbia yielded 155,500 tons from 57,603 acres, as compared with 136,400 tons from 60,612 acres in 1920. A return of 1,133,476 tons of grain hay in Alberta in 1921 was made for the first time. Of alfalfa the total yield in 1921 was 662,200 tons from 263,892 acres, as compared with 583,790 tons from 238,556 acres in 1920 and 414,708 tons from 174,206 acres, the five-year average. The yield per acre was 2.50 tons, as against 2.45 tons in 1920 and 2.40 tons, the average. Fodder corn gave the excellent yield of 6,361,600 tons from 585,395 acres, as against 5,641,750 tons from 588,977 acres in 1920 and 3,994,036 tons from 452,478 acres, the five-year average. The yield per acre was  $10\frac{3}{4}$  tons, as compared with 9.60 tons in 1920 and 8.85 tons, the five-year average. The total yield of fodder corn for 1921 is the highest on record for Canada, and the average yield per acre was the highest with only one exception, viz.,  $11\frac{1}{4}$  tons in 1908.

**Values of Field Crops.**—According to returns of crop correspondents, the average prices per bushel, as received by farmers, for grain and other crops of Canada in 1921, were as follows, the corresponding prices for 1920 and for the five-year period 1916-20 being given within brackets: fall wheat \$1.02 (\$1.88; \$1.98); spring wheat 80 cents (\$1.60; \$1.79); all wheat 81 cents (\$1.62; \$1.81); oats 34 cents (53c.; 65c.); barley 47 cents (83c.; \$1); rye 72 cents (\$1.33; \$1.40); peas \$1.96 (\$2.42; \$2.84); beans \$2.90 (\$3.88; \$5.33); buckwheat

89 cents (\$1.28; \$1.41); mixed grains 62 cents (90c.; \$1.11); flaxseed \$1.44 (\$1.94; \$2.66); corn for husking 83 cents (\$1.16; \$1.42); potatoes, 77 cents (97c.; 95c.); turnips, mangolds, etc., 34 cents (41c.; 44c.). For fodder crops the prices were per ton: hay and clover \$23.56 (\$26.10; \$17.03); alfalfa \$19.75 (\$23.79; \$18.67); fodder corn \$7.05 (\$7.75; \$6.54); sugar beets \$6.50 (\$12.80; \$10.74). In general, the unit prices for all descriptions were considerably less for 1921 than they were for either of the two preceding years; in fact, for wheat the price per bushel for 1921 was only 6 cents above the pre-war five-year average 1910-14, whilst for oats and barley the prices per bushel were somewhat less.

The total values of crops on farms in 1921 were estimated as follows, the corresponding values for 1920 and for the five-year average 1916-20 being given within brackets: wheat \$242,936,000 (\$427,357,300; \$412,778,400); oats \$146,395,300 (\$280,115,400; \$283,318,520); barley \$28,254,150 (\$52,821,400; \$58,841,754); rye \$15,399,300 (\$15,085,650; \$10,303,490); peas \$5,439,400 (\$8,534,300; \$9,363,160); beans \$3,155,800 (\$4,918,100; \$8,427,640); buckwheat \$7,285,100 (\$11,512,500; \$12,436,000); mixed grains \$13,901,220 (\$29,236,200; \$27,168,150); flaxseed \$5,938,400 (\$15,502,200; \$17,937,920); corn for husking \$12,317,000 (\$16,593,400; \$16,926,080); potatoes \$82,147,600 (\$129,803,300; \$96,543,900); turnips, mangolds, etc., \$26,620,400 (\$48,212,700; \$39,801,080); hay and clover \$267,764,200 (\$348,166,200; \$247,616,260); grain hay \$14,476,000; alfalfa \$13,211,000 (\$13,887,700; \$7,751,740); fodder corn \$44,880,800 (\$43,701,000; \$26,110,100); sugar beets \$1,742,000 (\$5,278,700; \$2,192,700). The aggregate value of all field crops in 1921 was \$931,863,670, as compared with \$1,455,244,050 in 1920 and \$1,537,170,100 in 1919, the highest on record.

**Grain Yields of the Prairie Provinces.**—The total yields in the three Prairie Provinces (Manitoba, Saskatchewan and Alberta) were estimated as follows: wheat 280,098,000 bushels from 22,181,329 sown acres, as compared with 234,138,300 bushels from 16,841,174 acres in 1920; oats 284,147,500 bushels from 10,819,641 acres, as compared with 314,297,000 bushels from 10,070,476 acres in 1920; barley 44,681,600 bushels from 2,109,065 acres, as compared with 40,760,500 bushels from 1,838,791 acres in 1920; rye 19,109,700 bushels from 1,688,228 acres, as compared with 8,273,600 bushels from 482,011 acres in 1920; and flaxseed 3,945,700 bushels from 516,972 acres, as compared with 7,588,800 bushels from 1,391,076 acres in 1920. According to reports from crop correspondents in December last, the following areas were estimated to have produced no grain: wheat 1,560,847 acres (7 p.c. of area sown); oats 2,365,753 acres (21.9 p.c. of area sown); barley 129,200 acres (6.1 p.c. of area sown); rye 308,687 acres (18.3 p.c. of area sown); flaxseed 30,723 acres (6.3 p.c. of area sown).

**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21,  
and Five Year Average, 1916-20.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Canada—</b>						
Fall wheat.....1916	818,264	21.50	17,590,000	59.52	1.54	27,118,300
1917	725,300	21.50	15,533,450	59.37	2.08	32,336,900
1918	416,615	19.00	7,942,800	61.19	2.08	16,516,000
1919	672,793	23.75	16,006,000	61.20	2.45	39,336,000
1920	814,133	24.00	19,469,200	60.14	1.88	36,550,500
1921	720,635	21.50	15,520,200	58.77	1.02	15,846,000
Averages.....1916-20	689,421	22.25	15,308,290	60.28	1.98	30,371,540
Spring wheat.....1916	14,551,445	16.85	245,191,000	56.51	1.29	316,978,100
1917	14,030,550	15.50	218,209,400	59.48	1.93	420,701,700
1918	16,937,287	10.75	181,132,550	58.69	2.02	365,161,700
1919	18,453,175	9.50	177,254,400	58.53	2.36	418,386,000
1920	17,418,241	14.00	243,720,100	59.07	1.60	390,806,800
1921	22,540,589	12.75	285,337,900	58.10	0.80	227,090,000
Averages.....1916-20	16,278,140	13.10	213,101,490	58.46	1.79	382,406,860
All wheat.....1916	15,369,709	17.10	262,781,000	57.10	1.31	344,096,400
1917	14,755,850	15.75	233,742,850	59.46	1.94	453,038,600
1918	17,353,902	11.00	189,075,350	59.44	2.02	381,677,700
1919	19,125,968	10.00	193,260,400	59.12	2.37	457,722,000
1920	18,232,374	14.50	263,189,300	59.35	1.62	427,357,300
1921	23,261,224	13.00	300,858,100	58.11	0.81	242,936,000
Averages.....1916-20	16,967,561	13.50	228,409,780	58.89	1.81	412,778,400
Oats.....1916	10,996,487	37.30	410,211,000	33.86	0.51	210,957,500
1917	13,313,400	30.25	403,009,800	33.55	0.69	277,065,300
1918	14,790,336	28.75	426,312,550	35.61	0.78	331,357,400
1919	14,952,114	26.25	394,387,000	34.16	0.80	317,097,000
1920	15,849,928	33.50	530,709,700	35.62	0.53	280,115,400
1921	16,949,029	25.25	426,232,900	32.97	0.34	146,395,300
Averages.....1916-20	13,980,453	31.00	432,926,000	34.56	0.65	283,318,520
Barley.....1916	1,802,996	23.72	42,770,000	45.66	0.82	35,024,000
1917	2,392,200	23.00	55,057,750	46.97	1.08	59,654,400
1918	3,153,711	24.50	77,287,240	47.24	1.00	77,378,670
1919	2,645,509	21.25	56,389,400	46.32	1.23	69,330,300
1920	2,551,919	24.75	63,310,550	47.62	0.83	52,821,400
1921	2,795,665	21.25	59,709,100	46.05	0.47	28,254,150
Averages.....1916-20	2,509,267	23.50	58,962,988	46.76	1.00	58,841,754
Rye.....1916	148,404	19.38	2,876,400	54.95	1.11	3,196,000
1917	211,880	18.25	3,857,200	53.44	1.62	6,267,200
1918	555,294	15.25	8,504,400	55.60	1.49	12,728,600
1919	753,081	13.50	10,207,400	55.09	1.40	14,240,000
1920	649,654	17.50	11,306,400	55.44	1.33	15,085,650
1921	1,842,498	11.75	21,455,260	55.06	0.72	15,399,300
Averages.....1916-20	463,663	15.85	7,350,360	54.90	1.40	10,303,490
Pears.....1916	151,790	14.50	2,218,100	59.88	2.22	4,919,000
1917	198,881	15.25	3,026,340	59.81	3.54	10,724,100
1918	235,976	18.25	4,313,400	59.93	2.99	12,899,100
1919	230,351	14.75	3,406,300	59.60	2.86	9,739,300
1920	186,348	19.00	3,528,100	60.44	2.42	8,534,300
1921	192,749	14.25	2,769,981	59.42	1.96	5,439,400
Averages.....1916-20	200,669	16.50	3,298,448	59.93	2.84	9,363,160
Beans.....1916	32,500	12.70	412,600	60.00	5.40	2,228,000
1917	92,457	13.75	1,274,000	59.70	7.45	9,493,400
1918	228,577	15.50	3,563,380	58.67	5.41	19,263,900
1919	83,577	16.50	1,388,600	59.99	4.48	6,214,800
1920	72,163	17.50	1,265,300	59.73	3.88	4,918,100
1921	62,479	17.50	1,089,900	59.30	2.90	3,155,800
Averages.....1916-20	101,855	15.50	1,580,776	59.62	5.33	8,427,640
Buckwheat.....1916	341,500	17.50	5,976,000	46.35	1.07	6,375,000
1917	395,977	18.00	7,149,400	46.49	1.46	10,443,400
1918	548,097	20.75	11,375,500	47.41	1.58	18,018,100
1919	444,732	23.50	10,550,800	47.23	1.50	15,831,000
1920	378,476	23.75	8,994,700	47.95	1.28	11,512,500
1921	360,758	22.75	8,230,100	47.35	0.89	7,285,100
Averages.....1916-20	421,756	21.00	8,809,280	47.09	1.41	12,436,600

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Mixed grains.....1916	412,670	25.75	10,584,800	43.13	0.88	9,300,900
1917	497,236	32.50	16,157,080	44.41	1.16	18,801,750
1918	921,826	38.75	35,662,300	46.39	1.14	40,726,500
1919	901,612	31.00	27,851,700	44.83	1.36	37,775,400
1920	811,634	40.00	32,420,700	44.65	0.90	29,236,200
1921	861,136 <sup>a</sup>	25.75	22,271,500	41.62	0.62	13,901,220
Averages.....1916-20	708,996	34.50	24,535,316	44.68	1.11	27,168,150
Flaxseed.....1916	657,781	12.56	8,259,800	54.99	2.04	16,889,900
1917	919,500	6.50	5,934,900	54.73	2.65	15,737,000
1918	1,068,120	5.75	6,055,200	53.72	3.13	18,951,000
1919	1,093,115	5.00	5,472,800	55.14	4.13	22,609,500
1920	1,428,164	5.60	7,997,700	54.79	1.94	15,502,200
1921	533,147	7.75	4,111,800	54.34	1.44	5,938,400
Averages.....1916-20	1,033,336	6.55	6,744,080	54.67	2.66	17,937,920
Corn for husking.....1916	173,000	36.25	6,282,000	56.51	1.07	6,747,000
1917	234,339	33.00	7,762,700	56.18	1.84	14,307,200
1918	250,000	56.75	14,205,200	53.97	1.75	24,902,800
1919	264,607	64.00	16,940,500	-	1.30	22,080,000
1920	291,650	49.25	14,334,800	56.45	1.16	16,593,400
1921	296,866	50.25	14,904,000	55.56	0.83	12,317,000
Averages.....1916-20	242,719	49.00	11,905,040	55.78	1.42	16,926,080
Potatoes.....1916	472,992	133.82	63,297,000	-	0.81	50,982,300
1917	656,958	121.50	79,892,000	-	1.01	80,804,400
1918	735,192	142.00	104,346,200	-	0.98	102,235,300
1919	818,767	153.50	125,574,900	-	0.95	118,894,200
1920	784,544	170.50	133,831,400	-	0.97	129,803,300
1921	701,912	152.75	107,346,000	-	0.77	82,147,600
Averages.....1916-20	693,690	146.15	101,388,300	-	0.95	96,543,900
Turnips, mangolds, etc.....1916	141,839	264.24	36,921,000	-	0.39	14,329,000
1917	218,233	290.75	63,451,000	-	0.46	29,253,000
1918	325,037	377.50	122,699,600	-	0.43	52,252,000
1919	317,296	354.00	112,288,600	-	0.50	54,958,700
1920	290,286	401.00	116,390,900	-	0.41	48,212,700
1921	227,675	347.75	79,150,300	-	0.34	26,620,400
Averages.....1916-20	258,538	349.50	90,350,220	-	0.44	39,801,080
Hay and clover.....1916	7,821,257	1.86	14,527,000	-	per ton.	11.60
1917	8,225,034	1.66	13,684,700	-	10.33	141,376,700
1918	10,544,625	1.40	14,772,300	-	16.25	241,277,300
1919	10,595,383	1.55	16,348,000	-	20.72	338,713,200
1920	10,379,292	1.30	13,338,700	-	26.10	348,166,200
1921	10,614,951	1.07	11,366,100	-	23.56	267,764,200
Averages.....1916-20	9,513,118	1.55	14,534,140	-	17.03	247,616,260
Grain hay, (Alberta).....1921	-	-	1,133,476	-	10.00	11,335,000
Grain hay, (B.C.).....1919	60,390	2.50	151,000	-	29.00	4,379,000
1920	60,612	2.25	136,400	-	33.12	4,518,000
1921	57,603	2.70	155,500	-	20.20	3,141,000
Averages.....1919-20	60,501	2.40	143,700	-	30.96	4,448,500
Alfalfa.....1916	99,350	2.91	286,750	-	10.69	3,066,000
1917	109,825	2.39	262,400	-	11.59	3,041,300
1918	196,428	2.25	446,400	-	17.84	7,963,500
1919	226,869	2.20	494,200	-	21.85	10,800,200
1920	238,556	2.45	583,790	-	23.79	13,887,700
1921	263,892	2.50	662,200	-	19.95	13,211,000
Averages.....1916-20	174,206	2.40	414,708	-	18.67	7,751,740
Fodder corn.....1916	293,058	6.65	1,907,800	-	4.92	9,396,000
1917	366,518	7.34	2,690,370	-	5.14	13,834,900
1918	502,069	9.50	4,787,500	-	6.15	29,439,100
1919	511,769	9.75	4,942,760	-	6.92	34,179,500
1920	588,977	9.60	5,641,750	-	7.75	43,701,000
1921	585,395	10.75	6,361,600	-	7.05	44,880,800
Averages.....1916-20	452,478	8.85	3,994,036	-	6.51	26,110,100

<sup>a</sup>Including "Other Grains" in Manitoba.



**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per ton.	Total Value.
	acres.	tons.	tons.	lb.	\$	\$
<b>Canada—con.</b>						
Sugar Beets.....1916	15,000	4.75	71,000	—	6.20	440,000
1917	14,000	8.40	117,600	—	6.75	793,800
1918	18,000	10.00	180,000	—	10.25	1,845,000
1919	24,500	9.80	240,000	—	10.86	2,606,000
1920	36,288	11.37	412,400	—	12.80	5,278,700
1921	28,367	9.45	268,000	—	6.50	1,742,000
Averages.....1916-20	21,558	9.45	204,200	—	10.74	2,192,700
<b>Prince Edward Island—</b>		bush.	bush.		per bush.	
Spring wheat.....1916	34,500	16.75	578,000	58.79	1.52	879,000
1917	36,000	14.50	522,000	57.63	2.09	1,091,000
1918	30,352	20.00	606,000	59.93	2.22	1,344,000
1919	35,595	17.00	624,600	59.00	2.73	1,705,200
1920	37,601	12.00	452,900	55.56	2.00	906,000
1921	34,106	16.75	573,000	59.89	1.00	573,000
Averages.....1916-20	34,810	16.00	556,700	58.18	2.13	1,185,040
Oats.....1916	199,000	37.25	7,413,000	36.93	0.61	4,522,000
1917	201,000	32.25	6,482,300	34.80	0.80	5,185,800
1918	169,729	34.50	5,839,000	36.42	0.77	4,535,000
1919	174,937	34.00	6,038,000	36.00	0.85	5,132,000
1920	183,452	27.75	5,095,000	32.15	0.70	3,567,000
1921	189,453	27.00	5,118,000	36.04	0.50	2,560,000
Averages.....1916-20	185,623	33.25	6,173,460	35.26	0.75	4,588,360
Barley.....1916	3,600	29.25	105,000	47.40	0.95	100,000
1917	3,500	28.50	99,750	46.45	1.22	121,700
1918	5,672	28.50	162,000	49.31	1.25	203,400
1919	5,636	29.00	164,000	50.00	1.40	229,700
1920	5,046	24.50	123,000	47.47	1.27	156,200
1921	6,354	23.25	147,400	48.41	0.75	110,550
Averages.....1916-20	4,691	27.85	130,750	48.13	1.24	162,200
Peas.....1916	60	22.25	1,300	59.71	2.19	2,800
1917	60	14.00	840	60.60	2.86	2,400
1918	460	16.00	7,300	60.66	2.90	21,200
1919	490	16.00	8,100	60.00	3.25	26,300
1920	164	16.50	2,700	60.00	3.00	8,100
1921	212	23.50	5,000	55.00	1.25	6,300
Averages.....1916-20	247	16.40	4,048	60.19	3.00	12,160
Buckwheat.....1916	2,500	27.25	68,000	49.10	1.00	68,000
1917	2,500	29.00	72,500	47.80	1.32	95,700
1918	5,592	21.75	122,000	48.77	1.44	175,500
1919	4,094	20.75	87,800	48.80	1.50	132,000
1920	4,035	23.50	95,000	46.67	1.30	123,500
1921	2,932	24.75	72,800	46.15	0.75	54,600
Averages.....1916-20	3,744	23.80	89,060	48.23	1.34	118,940
Mixed grains.....1916	8,000	41.25	330,000	47.60	0.75	248,000
1917	7,800	38.25	298,400	42.61	0.98	292,400
1918	13,475	44.50	600,000	45.00	1.04	623,400
1919	18,900	44.00	843,400	44.00	1.22	1,039,400
1920	16,504	33.75	556,600	41.44	0.85	473,000
1921	16,770	29.25	491,900	41.47	0.80	393,520
Averages.....1916-20	12,936	40.65	525,680	44.13	1.02	535,240
Potatoes.....1916	31,000	206.00	6,386,000	—	0.52	3,321,000
1917	35,000	175.00	6,125,000	—	0.75	4,594,000
1918	31,543	170.00	5,362,300	—	0.63	3,378,000
1919	36,234	125.00	4,529,000	—	0.85	3,850,000
1920	36,322	170.00	6,174,700	—	0.65	4,013,600
1921	36,921	162.00	5,965,800	—	0.45	2,684,600
Averages.....1916-20	34,020	168.00	5,715,400	—	0.67	3,831,320
Turnips, mangolds, etc.....1916	8,000	477.00	3,816,000	—	0.28	1,068,000
1917	8,100	505.39	4,094,000	—	0.31	1,269,000
1918	8,246	520.50	4,292,000	—	0.29	1,244,700
1919	12,337	518.00	6,396,000	—	0.26	1,638,800
1920	9,397	481.75	4,529,000	—	0.30	1,359,000
1921	9,961	570.00	5,682,200	—	0.20	1,336,400
Averages.....1916-20	9,216	501.90	4,625,400	—	0.28	1,315,900

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per ton.	Total Value.	
	acres.	tons.	tons.	lb.	\$	\$	
<b>Prince Edward Island—con.</b>							
Hay and clover.....	1916	199,000	1.70	338,000	—	11.56	3,907,000
	1917	197,000	1.55	305,400	—	12.67	3,869,000
	1918	222,691	1.50	334,000	—	14.17	4,732,800
	1919	237,883	1.80	428,000	—	20.00	8,564,000
	1920	243,394	1.25	304,200	—	26.00	7,909,000
	1921	255,010	0.80	215,200	—	30.00	6,455,200
Averages.....	1916-20	219,994	1.55	341,920	—	16.95	5,796,360
Fodder corn.....	1916	250	13.00	3,300	—	2.50	8,300
	1917	250	7.00	1,800	—	5.00	9,000
	1918	420	5.25	2,200	—	9.00	19,800
	1919	522	12.00	6,260	—	8.00	50,000
	1920	190	8.00	1,500	—	10.00	15,000
	1921	485	10.00	4,800	—	6.00	28,800
Averages.....	1916-20	326	9.25	3,012	—	6.78	20,420
<b>Nova Scotia—</b>							
Spring wheat.....	1916	13,400	bush.	bush.	per bush.	1.70	444,000
	1917	16,200	15.75	255,150	57.93	2.34	597,000
	1918	32,737	22.25	728,000	59.43	2.36	1,718,000
	1919	28,931	19.50	564,000	58.32	2.81	1,585,000
	1920	26,116	19.50	511,900	59.00	2.15	1,098,000
	1921	16,294	15.50	252,000	58.77	1.42	357,000
Averages.....	1916-20	23,477	19.75	464,010	58.93	2.35	1,088,400
Oats.....	1916	116,000	34.75	4,031,000	34.19	0.71	2,862,000
	1917	123,000	29.25	3,597,800	32.28	0.92	3,310,000
	1918	145,036	37.25	5,403,000	34.69	1.06	5,727,000
	1919	158,838	36.00	5,718,000	34.54	1.14	6,519,000
	1920	152,976	30.25	4,636,800	33.45	1.00	4,614,000
	1921	136,904	28.75	3,927,400	34.15	0.74	2,897,300
Averages.....	1916-20	139,170	33.60	4,677,320	33.83	0.98	4,606,400
Barley.....	1916	4,700	26.25	123,000	48.58	0.99	122,000
	1917	4,800	24.75	118,800	46.54	1.34	159,200
	1918	11,571	30.00	347,000	48.19	1.62	562,000
	1919	13,894	31.25	434,000	46.97	1.77	768,000
	1920	11,487	26.00	298,400	46.76	1.51	452,000
	1921	8,686	23.00	200,100	47.58	1.16	231,600
Averages.....	1916-20	9,290	28.45	264,240	47.41	1.56	412,640
Rye.....	1916	320	17.00	5,400	56.00	1.25	6,800
	1917	300	15.00	4,500	54.50	1.67	7,500
	1918	531	14.50	7,700	55.67	1.85	14,200
	1919	1,046	29.50	31,000	53.00	1.55	48,000
	1920	470	15.00	7,100	56.00	1.50	10,650
	1921	369	14.25	5,260	52.50	1.50	7,900
Averages.....	1916-20	533	20.90	11,140	55.03	1.56	17,430
Peas.....	1916	180	17.75	3,200	59.80	2.73	8,700
	1917	170	14.25	2,400	58.50	4.44	10,700
	1918	1,753	18.75	33,000	59.50	3.20	106,000
	1919	1,896	20.00	38,000	58.50	3.84	146,000
	1920	1,046	20.50	21,400	56.81	3.67	78,500
	1921	775	16.75	12,981	58.20	3.36	43,600
Averages.....	1916-20	1,009	19.40	19,600	58.62	3.57	69,980
Beans.....	1916	850	16.25	13,800	60.00	5.62	78,000
	1917	1,000	17.75	17,750	59.00	7.95	141,300
	1918	8,829	16.25	143,000	59.14	7.34	1,050,000
	1919	6,859	12.75	87,000	57.56	6.37	554,000
	1920	4,617	18.50	85,900	58.50	6.00	515,400
	1921	2,982	19.25	57,800	59.86	4.36	251,500
Averages.....	1916-20	4,431	15.68	69,490	58.84	6.73	467,700
Buckwheat.....	1916	10,000	24.50	245,000	46.97	0.84	206,000
	1917	10,900	21.00	228,900	46.56	1.14	261,000
	1918	19,342	23.00	445,000	47.10	1.35	601,000
	1919	17,384	25.25	439,000	47.23	1.55	680,000
	1920	13,106	22.25	291,400	47.27	1.36	397,000
	1921	9,404	20.50	192,500	48.07	1.06	203,500
Averages.....	1916-20	14,146	23.30	329,860	47.03	1.30	429,000

**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Nova Scotia—con.</b>						
Mixed grains.....1916	4,100	34.00	139,000	44.07	0.92	128,000
1917	4,000	24.00	96,000	39.91	1.24	119,000
1918	5,407	36.00	195,000	42.24	1.30	254,000
1919	8,828	37.50	218,000	46.77	1.53	334,000
1920	6,171	32.50	200,600	39.20	1.32	265,000
1921	4,713	30.00	141,100	44.46	0.97	136,700
Averages.....1916-20	5,661	30.00	169,720	42.44	1.30	220,000
Potatoes.....1916	34,500	201.00	6,935,000	—	0.69	4,785,000
1917	41,000	174.94	7,173,000	—	0.92	6,599,000
1918	51,250	190.75	9,776,000	—	0.93	9,092,000
1919	62,060	161.00	9,992,000	—	1.09	10,891,000
1920	50,092	203.75	10,209,000	—	0.98	9,966,000
1921	39,168	163.75	6,414,000	—	0.95	6,093,000
Averages.....1916-20	47,781	184.50	8,817,000	—	0.94	8,266,600
Turnips, mangolds, etc.....1916	9,000	404.00	3,636,000	—	0.42	1,527,000
1917	9,100	350.93	3,193,000	—	0.47	1,501,000
1918	23,823	391.25	9,320,700	—	0.58	5,406,000
1919	30,291	537.75	16,289,000	—	0.60	9,773,000
1920	19,946	431.75	8,611,000	—	0.62	5,368,000
1921	15,436	495.00	7,641,000	—	0.20	1,528,000
Averages.....1916-20	18,432	445.40	8,209,940	—	0.57	4,715,000
Hay and clover.....1916	553,000	1.80 tons.	995,000	—	12.25 per ton.	12,189,000
1917	542,000	1.65	894,300	—	11.83	10,580,000
1918	605,464	1.45	878,000	—	20.00	17,560,000
1919	678,357	2.10	1,425,000	—	22.34	31,835,000
1920	632,069	1.50	948,000	—	35.00	24,966,000
1921	571,661	1.35	771,700	—	23.00	17,749,000
Averages.....1916-20	602,178	1.70	1,028,060	—	18.90	19,426,000
Alfalfa.....1916	30	5.00	150	—	15.00	2,300
1917	30	3.50	100	—	15.00	1,500
Averages.....1916-17	30	4.15	125	—	15.00	1,900
Fodder corn.....1916	500	8.75	4,400	—	2.50	11,000
1917	480	9.20	4,400	—	6.00	26,400
1918	4,644	9.50	44,000	—	9.00	396,000
1919	2,960	9.50	28,000	—	8.00	224,000
1920	1,451	8.00	11,600	—	10.00	116,000
1921	1,466	6.50	9,500	—	6.00	57,000
Averages.....1916-20	2,007	9.20	18,480	—	8.37	154,680
<b>New Brunswick—</b>						
		bush.	bush.		per bush.	
Spring wheat.....1916	14,000	17.25	242,000	59.20	1.72	416,000
1917	16,000	12.00	192,000	58.43	2.25	432,000
1918	49,453	19.00	940,250	59.68	2.32	2,183,700
1919	35,641	17.50	623,000	59.61	2.80	1,744,400
1920	29,485	15.75	464,400	58.25	2.11	979,900
1921	28,028	15.25	427,000	59.20	1.50	641,000
Averages.....1916-20	28,916	17.00	492,330	59.03	2.34	1,151,200
Oats.....1916	198,000	30.50	6,039,000	35.49	0.68	4,107,000
1917	190,000	22.50	4,275,000	33.33	0.94	4,018,500
1918	224,442	31.50	7,051,400	35.32	0.97	6,877,400
1919	305,484	30.25	9,261,000	35.10	0.98	9,086,000
1920	309,071	29.50	9,117,600	34.93	0.60	5,470,600
1921	284,728	25.00	7,118,000	31.50	0.65	4,627,000
Averages.....1916-20	245,399	29.15	7,148,800	34.83	0.83	5,911,900
Barley.....1916	1,900	23.75	45,000	46.70	1.00	45,000
1917	1,800	22.00	39,600	42.84	1.36	53,900
1918	6,601	24.75	163,140	47.87	1.55	253,270
1919	10,662	26.75	285,000	47.48	1.35	385,000
1920	8,177	23.75	194,200	46.50	1.41	273,800
1921	8,898	17.00	151,000	47.64	1.11	168,000
Averages.....1916-20	5,828	24.95	145,888	46.28	1.39	202,194

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>New Brunswick—con.</b>						
Rye.....1918	308	16.25	5,000	—	1.85	9,000
1919	353	20.00	7,000	56.00	2.00	14,000
1920	254	14.00	3,600	—	1.80	6,500
1921	479	17.50	8,400	—	1.00	8,400
Averages.....1918-20	305	17.05	5,200	56.00	1.89	9,833
Peas.....1916	400	16.50	6,600	60.21	2.46	16,200
1917	400	15.00	6,000	60.45	2.83	17,000
1918	4,077	14.75	60,100	59.37	3.68	221,200
1919	4,697	14.75	69,000	59.85	3.03	209,000
1920	2,844	15.00	42,700	60.50	2.35	100,300
1921	2,124	12.75	27,000	59.75	2.25	61,000
Averages.....1916-20	2,484	14.85	36,880	60.08	3.06	112,740
Beans.....1916	250	15.25	3,800	60.54	6.11	23,000
1917	300	19.50	5,850	59.00	8.75	51,200
1918	5,491	15.50	85,580	59.39	8.05	689,400
1919	6,409	16.50	106,000	58.58	5.25	556,000
1920	4,254	16.25	69,100	60.00	3.39	234,200
1921	2,292	12.75	29,000	59.50	4.00	116,000
Averages.....1916-20	3,341	16.20	54,066	59.50	5.75	310,760
Buckwheat.....1916	53,000	22.75	1,206,000	46.51	0.84	1,013,000
1917	57,000	19.50	1,111,500	45.48	1.13	1,256,000
1918	72,483	20.75	1,499,500	47.38	1.65	2,477,000
1919	74,642	25.00	1,871,000	47.74	1.36	2,547,000
1920	66,366	22.75	1,509,800	46.69	1.45	2,189,200
1921	49,812	22.25	1,108,000	47.84	1.00	1,108,000
Averages.....1916-20	64,698	22.25	1,439,560	46.76	1.32	1,896,440
Mixed grains.....1916	870	34.25	30,000	43.25	0.78	23,000
1917	840	19.50	16,380	43.29	1.10	18,000
1918	4,292	32.50	139,900	42.97	1.25	175,200
1919	5,297	33.75	179,000	43.83	1.23	220,000
1920	3,395	29.75	101,000	41.00	1.17	118,200
1921	4,089	23.50	96,000	41.67	0.88	84,000
Averages.....1916-20	2,939	31.75	93,256	42.87	1.19	110,880
Potatoes.....1916	39,000	192.00	7,488,000	—	0.84	6,290,000
1917	46,000	149.80	6,891,000	—	1.13	7,787,000
1918	57,272	158.50	9,077,600	—	1.00	9,077,600
1919	75,573	142.75	10,790,200	—	0.97	10,466,600
1920	78,335	198.00	15,510,300	—	0.70	10,857,200
1921	74,875	216.25	16,192,000	—	0.90	14,573,000
Averages.....1916-20	59,236	168.00	9,951,420	—	0.89	8,895,560
Turnips, mangolds, etc.....1916	7,700	411.00	3,165,000	—	0.45	1,424,000
1917	7,700	300.54	2,314,000	—	0.61	1,412,000
1918	18,507	350.00	6,477,500	—	0.58	3,757,000
1919	24,279	366.50	8,898,800	—	0.58	5,155,000
1920	20,030	353.00	7,070,600	—	0.20	1,414,100
1921	17,745	349.50	6,202,000	—	0.17	1,054,000
Averages.....1916-20	15,644	357.00	5,585,180	—	0.47	2,632,420
Hay and clover.....1916	574,000	1.48	850,000	—	11.27	9,563,000
1917	568,000	1.60	909,000	—	10.29	9,354,000
1918	740,637	1.50	1,111,000	—	15.30	16,998,300
1919	786,175	1.40	1,111,000	—	20.26	22,512,000
1920	726,380	1.20	871,700	—	27.87	24,294,300
1921	694,497	0.90	625,000	—	25.00	15,625,000
Averages.....1916-20	679,038	1.43	970,540	—	17.04	16,544,320
Alfalfa.....1918	1,178	1.50	1,800	—	9.00	16,200
Fodder corn.....1916	100	10.00	1,000	—	4.00	4,000
1917	85	9.00	770	—	6.00	4,600
1918	3,459	4.50	15,600	—	10.00	156,000
1919	5,906	5.00	30,000	—	8.00	240,000
1920	5,243	8.00	41,900	—	10.00	419,000
1921	3,738	7.00	26,000	—	10.00	260,000
Averages.....1916-20	2,959	6.05	17,854	—	9.23	164,720



**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Quebec—</b>						
Spring wheat.....1916	64,000	15.00	960,000	57.71	1.86	1,786,000
.....1917	277,400	14.00	3,883,600	57.94	2.46	9,553,700
.....1918	365,670	17.25	6,308,000	58.82	2.28	14,382,000
.....1919	251,089	16.75	4,206,000	59.12	2.86	12,029,000
.....1920	222,045	17.00	3,775,000	59.45	2.24	8,456,000
.....1921	180,616	15.25	2,754,000	58.19	1.59	4,379,000
Averages.....1916-20	236,041	16.20	3,826,520	58.61	2.42	9,241,340
Oats.....1916	1,073,000	22.75	24,411,000	33.55	0.77	18,796,000
.....1917	1,492,700	21.75	32,466,200	34.34	0.92	29,868,900
.....1918	1,932,720	27.25	52,667,000	35.98	1.00	52,667,000
.....1919	2,141,107	26.75	57,275,000	35.47	1.06	60,712,000
.....1920	2,205,908	30.25	66,729,000	36.51	0.88	58,722,000
.....1921	2,366,810	21.25	50,591,000	35.24	0.60	30,355,000
Averages.....1916-20	1,769,087	26.40	46,709,640	35.17	0.95	44,153,180
Barley.....1916	72,800	20.00	1,456,000	46.67	1.15	1,674,000
.....1917	165,600	18.50	3,063,600	48.14	1.58	4,840,500
.....1918	189,202	24.00	4,551,000	48.16	1.62	7,373,000
.....1919	234,892	22.75	5,344,000	47.63	1.64	8,764,000
.....1920	194,444	25.25	4,910,000	47.83	1.41	6,923,000
.....1921	191,673	21.25	4,073,000	46.19	1.00	4,073,000
Averages.....1916-20	171,387	22.55	3,864,920	47.69	1.53	5,914,900
Rye.....1916	8,300	14.25	118,000	53.97	1.40	165,000
.....1917	22,450	16.75	376,000	53.36	1.78	669,300
.....1918	29,063	16.25	472,000	54.78	2.10	991,000
.....1919	33,481	17.25	578,000	55.87	2.00	1,156,000
.....1920	28,462	18.75	534,000	55.70	1.88	1,004,000
.....1921	24,940	17.25	430,000	53.88	1.25	538,000
Averages.....1916-20	24,351	17.05	415,600	54.74	1.92	797,060
Peas.....1916	21,600	14.00	302,000	59.95	3.22	972,000
.....1917	66,457	12.00	797,500	59.75	4.51	3,596,700
.....1918	107,386	15.50	1,664,000	60.26	4.14	6,889,000
.....1919	81,642	15.00	1,225,000	60.14	3.62	4,435,000
.....1920	60,870	17.00	1,035,000	60.74	3.36	3,478,000
.....1921	65,259	14.75	963,000	59.43	2.50	2,408,000
Averages.....1916-20	67,591	14.85	1,004,700	60.17	3.86	3,874,140
Beans.....1916	4,400	17.75	78,000	60.18	5.56	434,000
.....1917	55,157	15.00	827,400	59.90	7.77	6,428,900
.....1918	109,803	17.00	1,867,000	59.45	5.72	10,679,000
.....1919	43,202	19.75	853,000	59.81	4.52	3,856,000
.....1920	35,835	18.00	645,000	60.15	4.08	2,632,000
.....1921	28,272	18.75	530,000	59.16	3.18	1,685,000
Averages.....1916-20	49,679	17.20	854,080	59.90	5.63	4,805,980
Buckwheat.....1916	101,000	19.00	1,919,000	46.35	1.21	2,322,000
.....1917	163,577	16.50	2,699,000	46.55	1.73	4,669,300
.....1918	227,018	20.75	4,711,000	48.20	1.77	8,338,000
.....1919	170,043	24.00	4,081,000	47.72	1.70	6,938,000
.....1920	151,765	25.75	3,908,000	48.19	1.38	5,393,000
.....1921	150,666	23.25	3,503,000	47.08	1.00	3,503,000
Averages.....1916-20	162,681	21.30	3,463,600	47.40	1.60	5,532,060
Mixed grains.....1916	91,000	20.25	1,843,000	44.04	0.99	1,825,000
.....1917	122,819	21.25	2,609,900	44.50	1.33	3,471,200
.....1918	194,288	27.00	5,246,000	45.49	1.46	7,659,000
.....1919	157,637	27.00	4,256,000	44.54	1.50	6,384,000
.....1920	143,423	29.25	4,195,000	46.10	1.26	5,286,000
.....1921	168,245	24.00	4,038,000	43.31	0.85	3,432,000
Averages.....1916-20	141,834	25.60	3,629,980	44.93	1.36	4,925,040
Flaxseed.....1916	500	10.50	5,300	54.50	2.50	13,300
.....1917	5,700	8.25	47,000	53.21	3.37	158,400
.....1918	7,357	11.25	83,000	54.66	3.74	310,000
.....1919	11,384	9.75	111,000	53.46	3.91	434,000
.....1920	16,035	11.50	184,000	55.79	3.57	657,000
.....1921	8,641	11.50	99,400	52.78	3.56	354,900
Averages.....1916-20	8,195	10.50	86,060	54.32	3.66	314,540

**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
<b>Quebec—con.</b>	acres.	bush.	bush.	lb.	\$	\$
Corn for husking.....1916	13,000	24.75	322,000	56.18	1.52	489,000
1917	74,339	24.25	1,802,700	56.89	2.25	4,056,000
1918	54,690	21.75	1,190,000	56.41	2.10	2,518,000
1919	43,603	41.00	1,788,000	—	1.84	3,290,000
1920	47,741	29.75	1,420,000	55.97	1.59	2,258,000
1921	46,182	29.50	1,362,000	55.28	1.15	1,567,000
Averages.....1916-20	46,674	27.95	1,304,540	56.36	1.93	2,522,200
Potatoes.....1916	112,000	131.00	14,672,000	—	0.97	14,232,000
1917	226,917	80.00	18,158,000	—	1.38	25,058,000
1918	264,871	147.00	38,936,000	—	0.98	38,157,000
1919	315,590	181.50	57,280,000	—	0.85	48,688,000
1920	310,692	185.50	57,633,000	—	1.00	57,633,000
1921	222,084	162.50	36,089,000	—	0.80	28,871,000
Averages.....1916-20	246,014	151.75	37,335,800	—	0.90	36,753,600
Turnips, mangolds, etc.....1916	10,000	265.00	2,650,000	—	0.48	1,272,000
1917	70,192	224.51	15,759,000	—	0.59	9,298,000
1918	95,526	295.50	28,228,000	—	0.53	14,960,800
1919	87,496	317.50	27,780,000	—	0.53	14,723,000
1920	83,613	329.25	27,530,000	—	0.50	13,765,000
1921	53,084	319.00	16,934,000	—	0.40	6,774,000
Averages.....1916-20	69,365	293.95	20,389,400	—	0.53	10,803,760
Hay and clover.....1916	2,985,000	1.75	5,224,000	—	per ton.	11.00
1917	2,961,983	1.71	5,065,000	—	9.58	48,523,000
1918	4,533,266	1.50	6,799,900	—	15.75	107,098,400
1919	4,299,360	1.50	6,449,000	—	20.54	132,462,000
1920	4,290,121	1.25	5,363,000	—	29.00	155,527,000
1921	4,426,671	0.95	4,205,000	—	29.00	121,945,000
Averages.....1916-20	3,813,946	1.50	5,780,180	—	17.34	100,214,880
Alfalfa.....1916	2,600	2.65	7,000	—	9.50	67,000
1917	3,818	2.26	8,600	—	8.37	72,000
1918	4,144	2.25	9,300	—	11.70	109,000
1919	28,488	2.35	67,000	—	14.22	953,000
1920	28,200	2.40	68,000	—	21.00	1,428,000
1921	29,300	2.20	64,500	—	25.00	1,613,000
Averages.....1916-20	13,450	2.40	31,980	—	16.44	525,800
Fodder corn.....1916	31,000	8.00	248,000	—	5.75	1,426,000
1917	69,030	8.50	586,800	—	5.00	2,934,000
1918	86,358	7.25	626,100	—	7.42	4,645,700
1919	74,007	8.25	611,000	—	8.41	5,139,000
1920	86,833	8.00	695,000	—	10.20	7,089,000
1921	89,546	9.00	806,000	—	9.50	7,657,000
Averages.....1916-20	69,446	7.95	553,380	—	7.67	4,246,740
<b>Ontario—</b>		bush.	bush.		per bush.	
Fall wheat.....1916	774,800	21.25	16,465,000	59.42	1.55	25,521,000
1917	656,500	21.50	14,114,800	59.38	2.09	29,499,900
1918	362,616	19.50	7,054,800	59.80	2.09	14,763,000
1919	619,494	24.30	15,052,000	61.33	2.45	36,877,000
1920	762,371	24.30	18,492,000	60.20	1.89	34,890,500
1921	621,420	22.00	13,667,900	58.55	1.05	14,362,000
Averages.....1916-20	635,156	22.40	14,235,720	60.03	1.99	28,310,280
Spring wheat.....1916	90,200	16.25	1,466,000	57.80	1.55	2,272,000
1917	113,000	19.50	2,203,500	59.32	2.08	4,583,300
1918	351,423	23.25	8,186,200	59.84	2.03	16,638,000
1919	361,150	15.60	5,646,500	58.27	2.46	13,890,400
1920	267,367	16.80	4,480,500	57.92	1.81	8,112,600
1921	152,904	12.50	1,907,500	56.85	1.06	2,014,000
Averages.....1916-20	236,628	18.55	4,396,540	58.63	2.07	9,099,260
All wheat.....1916	865,000	20.73	17,931,000	58.79	1.55	27,793,000
1917	769,500	21.25	16,318,300	59.36	2.09	34,083,200
1918	714,039	21.25	15,241,000	60.54	2.06	31,401,000
1919	980,644	21.20	20,698,500	59.76	2.45	50,767,400
1920	1,029,738	22.30	22,972,500	59.10	1.87	43,003,100
1921	774,324	20.10	15,575,400	57.88	1.05	16,376,000
Averages.....1916-20	871,784	21.35	18,632,260	59.51	2.01	37,409,540

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Ontario—con.</b>						
Oats.....1916	1,991,000	25.50	50,771,000	30.30	0.64	32,493,000
1917	2,687,000	36.50	98,075,500	34.11	0.72	70,614,400
1918	2,924,468	45.00	131,752,600	35.58	0.78	102,212,000
1919	2,674,341	29.30	78,388,000	32.76	0.91	71,378,000
1920	2,880,053	44.90	129,171,300	35.95	0.58	74,670,300
1921	3,094,958	23.40	72,575,000	28.69	0.47	33,774,000
Averages.....1916-20	2,631,372	37.10	97,631,680	33.74	0.72	70,273,540
Barley.....1916	326,000	23.00	7,498,000	44.94	0.99	7,422,000
1917	361,000	31.00	11,191,000	47.20	1.16	12,981,600
1918	660,404	36.75	24,247,700	48.13	1.06	25,809,000
1919	569,183	23.10	13,134,000	45.81	1.32	17,215,000
1920	484,328	34.40	16,660,350	48.70	0.94	15,653,200
1921	462,176	22.00	10,149,000	44.42	0.63	6,390,000
Averages.....1916-20	480,183	30.30	14,546,210	46.96	1.09	15,816,160
Rye.....1916	69,000	17.50	1,208,000	55.20	1.17	1,413,000
1917	68,000	17.75	1,207,000	55.69	1.64	1,979,500
1918	112,726	16.00	1,813,000	55.65	1.55	2,818,400
1919	140,072	15.80	2,219,000	54.97	1.48	3,279,000
1920	133,090	17.70	2,349,900	55.30	1.35	3,176,200
1921	122,868	14.50	1,775,600	54.29	0.88	1,571,000
Averages.....1916-20	104,578	16.80	1,759,380	55.36	1.44	2,533,220
Peas.....1916	126,000	14.25	1,796,000	59.71	2.06	3,700,000
1917	126,000	16.75	2,110,500	59.88	3.21	6,774,700
1918	113,862	21.00	2,381,000	59.85	2.24	5,338,700
1919	127,258	14.30	1,816,500	59.97	2.31	4,180,000
1920	109,187	20.20	2,209,500	60.43	2.00	4,419,000
1921	105,964	13.60	1,441,100	59.50	1.50	2,166,000
Averages.....1916-20	120,460	17.10	2,062,700	59.97	2.37	4,882,480
Beans.....1916	27,000	11.75	317,000	59.72	5.34	1,693,000
1917	36,000	11.75	423,000	59.42	6.79	2,872,200
1918	100,082	13.75	1,387,800	59.27	4.66	6,464,500
1919	22,920	12.60	288,500	61.74	3.79	1,039,000
1920	22,744	16.70	380,500	59.70	3.10	1,181,100
1921	26,509	16.10	427,500	59.27	2.35	1,006,000
Averages.....1916-20	41,749	13.40	559,360	59.97	4.74	2,649,960
Buckwheat.....1916	175,000	14.50	2,538,000	45.80	1.09	2,766,000
1917	162,000	18.75	3,037,500	46.69	1.37	4,161,400
1918	223,662	20.50	4,598,000	46.96	1.40	6,426,600
1919	178,569	22.80	4,072,000	46.71	1.36	5,534,000
1920	143,204	22.30	3,190,500	48.10	1.07	3,409,800
1921	147,944	22.70	3,353,800	47.38	0.72	2,416,000
Averages.....1916-20	176,487	19.75	3,487,200	46.83	1.28	4,459,560
Mixed grains.....1916	286,000	26.00	7,436,000	40.77	0.89	6,618,000
1917	295,000	37.75	11,136,300	44.99	1.12	12,472,700
1918	619,389	44.25	27,462,400	46.01	1.09	29,823,900
1919	628,761	31.40	19,735,300	44.71	1.35	26,672,000
1920	581,689	44.20	25,712,400	44.50	0.81	20,709,000
1921	618,289	26.20	16,188,500	39.95	0.58	9,373,000
Averages.....1916-20	482,168	37.95	18,296,480	44.20	1.05	19,259,120
Flaxseed.....1916	4,500	9.25	42,000	57.17	2.78	117,000
1917	4,000	13.00	52,000	55.00	3.70	192,400
1918	15,925	12.25	196,200	56.72	3.41	670,000
1919	13,717	9.40	129,500	59.86	3.48	450,500
1920	21,053	10.70	224,900	56.50	2.43	545,500
1921	7,534	8.90	66,700	52.53	1.58	105,400
Averages.....1916-20	11,839	10.90	128,920	57.05	3.06	395,080
Corn for husking.....1916	160,000	37.25	5,960,000	57.18	1.05	6,258,000
1917	160,000	37.25	5,960,000	54.58	1.72	10,251,200
1918	195,310	66.75	13,015,200	58.23	1.72	22,384,800
1919	221,004	68.60	15,152,500	-	1.24	18,790,000
1920	243,909	53.00	12,914,800	56.60	1.11	14,335,400
1921	250,684	54.00	13,542,000	55.86	0.72	10,750,000
Averages.....1916-20	196,045	54.05	10,600,500	56.65	1.36	14,403,880

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Ontario—con.</b>						
Potatoes.....1916	133,000	61-00	8,113,000	—	1-28	10,385,000
1917	142,000	133-67	13,981,000	—	1-00	13,981,000
1918	166,203	116-60	19,376,000	—	1-26	24,413,000
1919	157,286	96-30	15,145,000	—	1-37	20,820,000
1920	157,509	152-10	23,961,700	—	0-97	23,131,200
1921	164,096	93-80	15,400,000	—	1-00	15,400,000
Averages.....1916-20	151,200	113-20	17,115,340	—	1-14	19,546,040
Turnips, mangolds, etc. ....1916	97,000	211-00	20,467,000	—	0-36	7,368,000
1917	94,000	340-93	32,047,000	—	0-35	11,216,000
1918	141,001	460-25	64,896,000	—	0-32	20,767,000
1919	123,029	348-00	42,756,000	—	0-35	14,027,000
1920	119,744	493-00	57,989,800	—	0-28	16,518,000
1921	104,157	351-25	36,586,000	—	0-35	12,805,000
Averages.....1916-20	114,955	379-50	43,631,160	—	0-32	13,979,200
Hay and clover.....1916	3,059,000	tons. 2-00	6,118,000	—	per ton. 11-90	72,804,000
1917	2,998,000	1-70	5,097,000	—	10-26	52,295,000
1918	3,470,036	1-32	4,596,900	—	16-50	75,848,000
1919	3,508,266	1-59	5,589,000	—	20-61	115,161,000
1920	3,533,740	1-26	4,459,000	—	24-30	108,356,000
1921	3,551,655	1-11	3,954,200	—	21-25	84,027,000
Averages.....1916-20	3,313,808	1-55	5,171,980	—	16-41	84,892,800
Alfalfa.....1916	56,000	3-00	168,000	—	9-75	1,638,000
1917	52,000	2-74	142,500	—	10-08	1,436,000
1918	144,010	2-28	329,000	—	15-78	5,191,000
1919	146,790	2-14	314,400	—	20-20	6,351,000
1920	162,820	2-45	399,580	—	23-49	9,384,400
1921	177,205	2-58	456,400	—	20-00	9,128,000
Averages.....1916-20	112,324	2-40	270,696	—	17-73	4,800,080
Fodder corn.....1916	248,000	6-50	1,612,000	—	4-80	7,738,000
1917	265,000	7-54	1,998,000	—	5-00	9,990,000
1918	380,946	10-35	3,944,300	—	5-73	22,601,000
1919	399,549	10-05	4,014,000	—	6-30	25,304,000
1920	449,176	10-39	4,668,050	—	6-85	31,976,000
1921	438,343	11-44	5,015,100	—	6-50	32,598,000
Averages.....1916-20	348,535	9-30	3,247,270	—	6-01	19,521,800
Sugar beets.....1916	15,000	4-75	71,000	—	6-20	440,000
1917	14,000	8-40	117,600	—	6-75	793,800
1918	18,000	10-00	180,000	—	10-25	1,845,000
1919	24,500	9-80	240,000	—	10-86	2,606,000
1920	36,238	11-37	412,400	—	12-80	5,278,700
1921	28,367	9-45	268,000	—	6-50	1,742,000
Averages.....1916-20	21,558	9-45	204,200	—	10-74	2,192,700
<b>Manitoba—</b>						
Fall wheat.....1916	3,829	bush. 15-93	61,000	—	per bush. 1-40	85,400
1917	3,860	22-25	85,900	62-33	2-20	189,000
1918	2,734	18-00	49,000	—	2-06	101,000
Averages.....1916-18	3,474	18-80	65,300	62-33	1-92	125,133
Spring wheat.....1916	2,721,896	10-88	29,606,000	51-23	1-23	36,415,400
1917	2,445,000	16-75	40,953,800	60-82	2-05	83,955,300
1918	2,980,968	16-25	48,142,100	60-16	2-06	99,173,096
1919	2,880,301	14-25	40,975,300	57-22	2-40	98,341,000
1920	2,705,622	13-90	37,542,000	59-56	1-83	68,739,000
1921	3,501,217	11-15	39,054,000	56-62	0-91	35,533,000
Averages.....1916-20	2,746,757	14-35	39,443,840	57-80	1-96	77,090,740
All wheat.....1916	2,725,725	10-88	29,667,000	—	1-23	36,500,800
1917	2,448,860	16-75	41,039,700	60-86	2-05	84,144,300
1918	2,983,702	16-35	48,191,100	—	2-06	99,274,000
1919	2,880,301	14-25	40,975,300	57-22	2-40	98,341,000
1920	2,705,622	13-90	37,542,000	59-56	1-83	68,769,000
1921	3,501,217	11-15	39,054,000	56-62	0-91	35,539,000
Averages.....1916-20	2,748,842	14-35	39,483,020	59-21	1-96	77,405,820



**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Manitoba—con.</b>						
Oats.....1916	1,443,599	33.55	48,439,000	33.05	0.49	23,735,100
1917	1,500,000	30.25	45,375,000	27.27	0.67	30,401,300
1918	1,714,894	31.75	54,473,500	35.21	0.71	38,676,000
1919	1,847,267	31.25	57,698,000	33.42	0.72	41,420,000
1920	1,873,954	30.75	57,657,000	34.89	0.56	32,007,000
1921	2,226,376	22.27	49,442,500	32.03	0.30	14,833,000
Averages.....1916-20	1,675,943	31.45	52,728,500	32.77	0.63	33,247,880
Barley.....1916	687,503	19.97	13,729,000	42.78	0.80	10,983,200
1917	708,030	22.50	15,930,000	46.27	1.07	17,045,100
1918	1,102,965	25.25	27,963,400	48.54	0.89	24,887,000
1919	893,947	19.25	17,149,400	43.90	1.17	20,137,000
1920	839,078	21.00	17,520,000	46.31	0.80	13,988,000
1921	1,043,144	18.87	19,681,600	45.02	0.43	8,463,000
Averages.....1916-20	846,299	21.80	18,458,360	45.56	0.94	17,408,060
Rye.....1916	30,050	18.54	557,000	56.50	1.06	590,400
1917	37,000	17.25	638,300	54.03	1.62	1,034,000
1918	240,469	16.25	3,935,700	73.66	1.41	5,549,000
1919	298,932	13.75	4,089,400	54.89	1.28	5,228,000
1920	148,602	15.50	2,318,600	54.91	1.35	3,140,100
1921	257,793	13.83	3,564,700	54.90	0.79	2,816,000
Averages.....1916-20	151,011	15.39	2,307,800	58.80	1.35	3,108,300
Peas.....1919	5,666	14.25	81,400	60.00	2.08	170,000
1920	4,162	15.00	62,200	60.00	1.10	68,400
1921	10,958	15.02	151,400	60.00	2.50	378,500
Averages.....1919-20	4,914	14.60	71,800	60.00	1.66	119,200
Mixed grains.....1916	1,400	32.25	45,000	42.00	0.45	20,300
1917	1,400	31.00	43,400	—	1.25	54,250
1918	30,309	28.25	856,000	43.50	1.03	882,000
1919	30,355	25.00	759,000	40.56	1.40	1,063,000
1920	28,800	21.25	612,000	43.50	1.87	1,144,000
1921	10,473 <sup>1</sup>	19.85	208,000	42.50	0.40	83,000
Averages.....1916-20	18,453	25.10	463,080	42.39	1.37	632,710
Flaxseed.....1916	15,684	13.38	210,000	—	2.13	447,300
1917	16,300	9.00	146,700	54.50	2.85	418,100
1918	107,961	10.00	1,091,000	54.72	3.15	3,437,000
1919	57,379	9.00	520,300	55.05	4.26	2,215,000
1920	146,455	7.90	1,157,800	54.66	2.25	2,587,700
1921	61,689	8.83	544,700	54.78	1.50	817,000
Averages.....1916-20	68,756	9.10	625,160	54.73	2.91	1,821,020
Potatoes.....1916	31,987	147.22	4,709,000	—	0.61	2,872,500
1917	34,400	105.90	3,643,000	—	0.76	2,769,000
1918	45,000	185.00	8,325,000	—	0.56	4,662,000
1919	42,000	126.00	5,287,500	—	0.81	4,266,000
1920	37,000	92.25	3,410,000	—	1.36	4,733,300
1921	38,081	153.10	5,858,200	—	0.45	2,636,000
Averages.....1916-20	38,078	133.25	5,074,900	—	0.76	3,860,560
Turnips, mangolds, etc.....1916	3,118	145.00	452,000	—	0.49	221,500
1917	2,500	185.12	463,000	—	0.63	292,000
1918	9,910	251.75	2,494,800	—	0.44	1,097,700
1919	6,045	184.00	1,113,000	—	0.60	663,000
1920	7,404	145.25	1,076,000	—	0.93	1,005,100
1921	4,411	231.00	1,020,100	—	0.27	275,000
Averages.....1916-20	5,795	193.25	1,119,760	—	0.59	655,860
Hay and clover.....1916	77,642	1.83 tons.	142,000 tons.	—	7.80 per ton.	1,107,600
1917	75,000	1.00	75,000	—	11.11	833,300
1918	74,000	1.00	74,000	—	16.00	1,184,000
1919	260,378	1.50	401,400	—	16.99	6,818,000
1920	208,512	1.50	311,900	—	16.00	4,968,900
1921	244,672	1.55	378,500	—	13.00	4,921,000
Averages.....1916-20	139,106	1.45	200,860	—	14.85	2,982,360

<sup>1</sup>Including other grains.

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per ton.	Total Value
	acres	tons.	tons.	lb.	\$	\$
<b>Manitoba—con.</b>						
Alfalfa.....1916	4,422	2.75	12,200	—	11.83	144,300
1917	4,400	2.07	9,100	—	13.45	122,400
1918	3,600	2.25	8,100	—	18.00	145,800
1919	5,181	2.20	11,400	—	22.40	256,200
1920	3,679	2.00	7,410	—	22.45	166,400
1921	5,676	2.59	14,700	—	17.00	250,000
Averages.....1916-20	4,256	2.25	9,642	—	17.32	167,020
Fodder corn.....1916	9,830	2.75	27,000	—	4.67	126,000
1917	9,800	4.86	47,600	—	7.50	357,000
1918	12,340	5.50	67,900	—	10.50	713,000
1919	16,867	6.80	114,500	—	13.28	1,520,000
1920	17,042	4.40	74,400	—	19.00	1,412,000
1921	17,296	7.20	124,900	—	9.00	1,124,000
Averages.....1916-20	13,176	5.05	66,280	—	12.46	825,600
<b>Saskatchewan—</b>						
		bush.	bush.		per bush.	
Fall wheat.....1916	15,258	21.24	324,000	59.50	1.41	456,800
1917	10,000	17.00	170,000	60.00	2.07	351,900
Averages.....1916-17	12,629	19.55	247,000	59.75	1.64	404,350
Spring wheat.....1916	9,016,851	16.33	147,235,000	55.18	1.28	188,460,800
1917	8,263,250	14.25	117,751,300	60.92	1.95	229,615,000
1918	9,249,260	10.00	92,493,000	60.97	1.99	184,061,000
1919	10,587,363	8.50	89,994,000	59.00	2.32	208,787,000
1920	10,061,069	11.25	113,135,300	59.95	1.55	175,360,000
1921	13,556,708	13.75	188,000,000	58.36	0.76	142,880,000
Averages.....1916-20	9,435,559	11.90	112,121,720	59.20	1.76	197,256,760
All wheat.....1916	9,032,109	16.34	147,559,000	55.27	1.28	188,917,600
1917	8,273,250	14.25	117,921,300	60.91	1.95	229,966,900
1918	9,249,260	10.00	92,493,000	60.97	1.99	184,061,000
1919	10,587,363	8.50	89,994,000	59.00	2.32	208,737,000
1920	10,061,069	11.25	113,135,300	59.95	1.55	175,360,000
1921	13,556,708	13.75	188,000,000	58.36	0.76	142,880,000
Averages.....1916-20	9,440,610	11.90	112,220,520	59.22	1.76	197,408,500
Oats.....1916	3,791,807	43.06	163,278,000	35.76	0.46	75,107,900
1917	4,521,600	27.25	123,213,600	34.58	0.62	76,392,400
1918	4,988,499	21.50	107,253,000	34.38	0.70	75,077,000
1919	4,837,747	23.10	112,157,000	35.48	0.70	78,510,000
1920	5,106,822	27.70	141,549,000	35.00	0.41	58,035,000
1921	10,061,522	30.00	170,513,000	35.24	0.24	40,372,000
Averages.....1916-20	4,649,295	27.85	129,490,120	35.04	0.56	72,624,460
Barley.....1916	367,207	27.00	9,916,000	46.02	0.77	7,635,300
1917	669,900	21.00	14,067,900	46.84	1.00	14,067,900
1918	699,296	17.00	11,888,000	46.10	0.88	10,461,000
1919	492,586	18.20	8,971,000	46.87	1.08	9,639,000
1920	519,014	20.25	10,501,500	46.75	0.66	6,931,000
1921	497,730	26.75	13,343,000	47.75	0.36	4,858,000
Averages.....1916-20	549,601	20.15	11,068,880	46.52	0.88	9,756,840
Rye.....1916	22,759	24.08	548,000	55.91	1.10	602,800
1917	53,250	18.75	998,400	43.00	1.63	1,627,400
1918	123,500	11.50	1,420,000	55.19	1.50	2,130,000
1919	190,482	10.50	2,000,000	55.52	1.31	2,620,000
1920	172,449	14.70	2,535,000	56.14	1.26	3,194,000
1921	1,208,299	11.25	13,546,000	56.04	0.67	9,080,000
Averages.....1916-20	112,488	13.35	1,500,280	53.15	1.36	2,034,840
Peas.....1916	1,600	32.50	52,000	60.00	2.25	117,000
1917	2,605	17.25	44,900	60.00	4.00	179,600
1918	4,251	20.00	85,000	60.00	1.50	128,000
1919	4,853	18.00	87,300	60.00	4.00	349,000
1920	2,519	14.50	36,500	—	2.00	73,000
1921	2,535	19.25	48,800	61.00	2.50	122,000
Averages.....1916-20	3,166	19.30	61,140	60.00	2.77	169,320



1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Alberta—con.</b>						
Spring wheat.....1916	2,586,798	24.95	64,539,000	58.00	1.33	85,836,900
1917	2,845,600	18.25	51,932,200	60.86	1.73	89,842,700
1918	3,848,424	6.00	23,091,000	59.94	1.92	44,335,000
1919	4,241,903	8.00	33,935,000	60.07	2.31	78,390,000
1920	4,036,483	20.50	82,748,000	61.32	1.52	125,777,000
1921	5,038,290	10.25	51,576,000	61.77	0.77	39,714,000
Averages.....1916-20	3,511,842	14.50	51,249,040	60.05	1.66	84,836,320
All wheat.....1916	2,604,975	24.99	65,088,000	58.45	1.33	86,600,000
1917	2,897,300	18.25	52,992,100	60.81	1.74	91,941,300
1918	3,892,489	6.00	23,752,000	59.97	1.92	45,604,000
1919	4,282,503	8.00	34,575,000	60.11	2.31	79,945,000
1920	4,074,483	20.50	83,461,000	61.30	1.52	126,861,000
1921	5,123,404	10.35	53,044,000	61.66	0.77	40,756,000
Averages.....1916-20	3,550,350	14.75	51,973,620	60.13	1.66	86,190,260
Oats.....1916	2,124,081	48.11	102,199,000	37.36	0.46	47,011,500
1917	2,537,900	34.00	86,288,600	37.09	0.63	54,361,800
1918	2,651,548	22.75	60,323,000	35.94	0.73	44,036,000
1919	2,767,372	23.75	65,725,000	36.60	0.64	42,064,000
1920	3,089,700	37.25	115,091,000	38.09	0.36	41,433,000
1921	2,911,743	22.00	64,192,000	37.38	0.24	15,406,000
Averages.....1916-20	2,634,121	32.50	85,925,320	37.02	0.53	45,781,260
Barley.....1916	336,586	29.04	9,774,000	46.18	0.71	6,939,500
1917	472,100	22.00	10,386,200	45.16	0.98	10,178,500
1918	470,073	16.50	7,756,000	44.17	0.97	7,523,000
1919	414,212	25.50	10,562,000	47.00	1.09	11,512,600
1920	480,699	26.50	12,739,000	48.12	0.62	7,898,000
1921	568,191	20.50	11,657,000	48.57	0.32	3,730,000
Averages.....1916-20	434,734	23.50	10,243,440	46.13	0.86	8,810,320
Rye.....1916	17,975	24.49	440,000	53.71	0.95	418,000
1917	30,880	20.50	633,000	55.25	1.50	949,500
1918	47,877	17.25	826,000	54.90	1.41	1,165,000
1919	83,804	14.00	1,173,000	55.14	1.42	1,666,000
1920	160,960	21.25	3,420,000	56.85	1.25	4,275,000
1921	222,136	9.00	1,999,000	55.29	0.62	1,239,000
Averages.....1916-20	68,299	19.00	1,298,400	55.17	1.30	1,694,700
Peas.....1916	650	20.00	13,000	57.50	2.25	29,300
1917	1,851	17.50	32,400	60.00	2.00	64,800
1918	1,994	18.00	36,000	60.00	1.50	54,000
1919	1,603	18.00	29,000	60.00	3.00	87,000
1920	2,899	17.00	49,000	60.00	2.00	98,000
1921	2,357	24.00	56,600	60.00	2.00	113,000
Averages.....1916-20	1,799	17.75	31,880	59.50	2.09	66,620
Beans.....1918	763	13.00	14,000	60.00	6.45	90,000
1919	690	10.00	6,900	60.00	4.00	28,000
1920	2,305	17.00	39,000	60.00	4.00	156,000
1921	339	19.00	6,400	60.00	2.00	13,000
Averages.....1918-20	1,253	16.00	19,967	60.00	4.57	91,333
Mixed grains.....1916	4,550	30.00	136,500	36.00	0.35	47,800
1917	24,027	25.75	618,700	51.50	1.20	742,400
1918	27,989	21.50	602,000	40.00	1.15	692,000
1919	26,000	36.25	943,000	57.00	0.83	783,000
1920	8,398	30.00	252,000	43.00	1.00	252,000
1921	9,813	22.75	223,000	43.00	0.27	60,000
Averages.....1916-20	18,193	28.00	510,440	45.50	0.99	503,440
Flaxseed.....1916	95,063	13.79	1,310,500	55.91	1.06	1,389,100
1917	139,800	7.00	978,600	54.00	2.78	2,720,500
1918	95,920	5.00	480,000	55.25	3.12	1,498,000
1919	80,690	2.75	222,000	55.75	4.15	921,000
1920	103,700	7.00	728,000	55.40	1.83	1,329,000
1921	28,434	6.00	171,000	57.00	1.28	219,000
Averages.....1916-20	103,035	7.25	743,420	55.22	2.11	1,571,520



**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.**

Field Crops.	Area.	Yield per acre	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>Alberta—con.</b>						
Potatoes.....1916	29,216	163.71	4,783,000	-	0.53	2,535,000
1917	48,917	151.46	7,409,000	-	0.76	5,631,000
1918	44,247	70.50	3,119,400	-	1.11	3,462,500
1919	45,848	179.75	8,241,200	-	0.83	6,840,200
1920	43,000	166.00	7,138,000	-	1.00	7,138,000
1921	51,377	153.50	8,143,000	-	0.50	4,072,000
Averages.....1916-20	42,246	144.50	6,138,120	-	0.83	5,121,340
Turnips, mangolds, etc.....1916	1,700	279.41	475,000	-	0.61	289,800
1917	10,947	207.56	2,272,000	-	0.74	1,681,000
1918	12,506	188.50	2,357,400	-	0.66	1,555,900
1919	12,500	221.50	2,768,800	-	1.06	2,934,900
1920	12,300	261.75	3,219,500	-	1.00	3,219,500
1921	8,202	153.50	1,259,000	-	0.30	378,000
Averages.....1916-20	9,991	222.00	2,218,540	-	0.87	1,936,220
Hay and clover.....1916	173,461	1.93 tons.	334,000 tons.	-	8.62 per ton.	2,879,100
1917	493,522	1.48	730,400	-	10.92	7,976,000
1918	469,000	0.85	398,700	-	15.82	6,307,400
1919	433,296	1.10	476,600	-	20.89	9,956,200
1920	383,527	1.30	498,600	-	20.00	9,972,000
1921	454,883	1.00	454,900	-	10.00	4,549,000
Averages.....1916-20	390,561	1.25	487,660	-	15.21	7,418,140
Grain hay.....1921	-	-	1,133,476	-	10.00	11,335,000
Alfalfa.....1916	20,612	2.65	54,600	-	10.70	584,200
1917	31,396	2.05	64,400	-	10.73	691,000
1918	24,285	2.00	48,600	-	21.50	1,044,900
1919	21,553	2.00	43,000	-	29.16	1,254,000
1920	19,906	2.25	44,800	-	24.00	1,075,000
1921	30,000	1.75	52,500	-	12.00	630,000
Averages.....1916-20	23,550	2.15	51,080	-	18.20	929,820
Fodder corn.....1916	685	2.56	1,700	-	9.00	15,300
1917	3,976	1.00	4,000	-	7.00	28,000
1918	700	5.50	3,800	-	10.50	40,000
1919	900	5.53	5,000	-	10.50	52,500
1920	7,644	4.25	32,500	-	18.00	585,000
1921	6,991	10.00	69,900	-	4.00	280,000
Averages.....1916-20	2,781	3.40	9,400	-	15.34	144,160
<b>British Columbia—</b>		bush.	bush.		per bush.	
Fall wheat.....1916	6,200	30.75	191,000	61.00	1.53	292,000
1917	3,240	31.75	102,850	60.67	1.92	197,500
1918	7,200	24.75	178,000	59.67	2.15	383,000
1919	12,699	24.75	314,000	59.50	2.88	904,000
1920	13,762	19.25	264,200	60.00	2.18	576,000
1921	14,101	27.25	384,300	61.25	1.15	442,000
Averages.....1916-20	8,620	24.35	210,010	60.17	2.24	470,500
Spring wheat.....1916	9,800	31.00	304,000	59.55	1.54	463,000
1917	13,100	28.50	515,850	59.55	2.00	1,031,700
1918	29,000	22.00	638,000	60.25	2.08	1,327,000
1919	31,202	22.00	686,000	58.50	2.79	1,914,000
1920	32,453	18.75	610,100	60.00	2.21	1,348,300
1921	32,426	24.50	794,400	60.00	1.25	993,000
Averages.....1916-20	24,111	22.85	550,790	59.57	2.21	1,217,800
All wheat.....1916	16,000	30.94	495,000	60.16	1.54	760,000
1917	21,340	29.00	618,700	59.94	1.99	1,229,200
1918	36,200	22.50	816,000	59.96	2.09	1,710,000
1919	43,901	22.75	1,000,000	59.00	2.82	2,818,000
1920	46,215	19.00	874,300	60.00	2.20	1,924,300
1921	46,527	25.25	1,178,700	60.05	1.22	1,435,000
Averages.....1916-20	32,731	23.25	760,800	59.81	2.22	1,688,300

1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—continued.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
<b>British Columbia—con.</b>						
Oats.....1916	60,000	60.50	3,630,000	37.15	0.64	2,323,000
1917	60,200	53.75	3,235,800	35.50	0.90	2,912,200
1918	39,000	39.75	1,550,000	34.17	1.00	1,550,000
1919	45,021	47.25	2,127,000	36.00	1.07	2,276,000
1920	47,992	34.75	1,663,000	36.00	0.96	1,596,500
1921	56,535	48.75	2,756,000	35.14	0.57	1,571,000
Averages.....1916-20	50,443	48.50	2,441,160	35.76	0.87	2,131,540
Barley.....1916	2,700	45.75	124,000	47.60	0.83	103,000
1917	5,500	29.25	160,900	48.67	1.28	206,000
1918	7,927	26.50	209,000	52.50	1.47	307,000
1919	10,497	33.00	346,000	47.75	1.82	630,000
1920	9,646	37.75	364,100	50.00	1.50	546,200
1921	8,833	34.75	307,000	48.33	0.75	230,000
Averages.....1916-20	7,254	33.25	240,800	49.30	1.49	358,440
Rye.....1918	820	30.00	25,000	60.00	2.07	52,000
1919	4,911	22.50	110,000	54.75	2.08	229,000
1920	5,367	25.75	138,200	55.00	2.02	279,200
1921	5,614	22.50	126,300	54.00	1.10	139,000
Averages.....1918-20	3,699	24.50	91,066	56.58	2.05	186,733
Peas.....1916	1,300	33.75	44,000	61.20	1.67	73,000
1917	1,338	23.75	31,800	59.83	2.46	78,200
1918	2,193	21.50	47,000	60.00	3.00	141,000
1919	2,251	23.00	52,000	59.00	2.60	137,000
1920	2,657	26.00	69,100	59.00	3.05	211,000
1921	2,565	25.00	64,100	59.43	2.20	141,000
Averages.....1916-20	1,948	25.00	48,780	59.81	2.62	128,040
Beans.....1918	2,748	18.50	51,000	—	4.20	214,000
1919	1,677	17.25	29,000	60.00	3.75	109,000
1920	1,615	20.00	32,300	60.00	4.50	145,400
1921	1,118	21.00	23,500	60.50	2.25	53,000
Averages.....1918-20	2,013	18.50	37,443	60.00	4.17	156,133
Mixed grains.....1916	2,600	50.00	130,000	52.00	1.25	163,000
1917	1,850	40.00	74,000	—	0.70	51,800
1918	3,228	21.50	69,000	—	1.10	76,000
1919	4,017	36.50	147,000	50.00	1.37	201,000
1920	4,893	36.00	176,100	41.00	1.25	220,000
1921	5,663	34.00	193,000	—	0.75	145,000
Averages.....1916-20	3,317	36.00	119,220	47.67	1.19	142,360
Potatoes.....1916	15,300	189.00	2,892,000	—	0.70	2,024,000
1917	15,024	166.55	2,502,000	—	0.69	1,726,400
1918	15,013	228.00	3,423,000	—	0.97	3,320,300
1919	18,000	170.00	3,060,000	—	1.00	3,060,000
1920	17,780	165.00	2,933,700	—	1.28	3,755,000
1921	16,704	176.00	2,940,000	—	0.90	2,646,000
Averages.....1916-20	16,223	182.50	2,962,140	—	0.94	2,777,140
Turnips, mangolds, etc.....1916	3,700	500.00	1,850,000	—	0.50	925,000
1917	4,590	344.58	1,582,000	—	0.64	1,012,000
1918	5,758	422.00	2,429,900	—	0.60	1,457,900
1919	7,337	365.00	2,696,000	—	0.75	2,022,000
1920	7,403	435.00	3,220,000	—	0.81	2,608,000
1921	6,809	366.00	2,492,000	—	0.67	1,670,000
Averages.....1916-20	5,767	408.50	2,355,580	—	0.68	1,604,980
Hay and clover.....1916	175,000	tons.	tons.	per ton.		
1917	129,254	2.67	467,000	—	17.75	8,289,000
1918	114,414	1.85	239,000	—	17.60	4,206,400
1919	126,251	1.90	217,400	—	33.25	7,228,600
1920	127,017	1.50	189,000	—	35.25	6,662,000
1921	137,301	2.00	254,000	—	35.00	8,890,000
Averages.....1916-20	134,387	2.30	315,800	—	23.68	7,478,000
		2.05	273,280	—	25.82	7,055,200

**1.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1916-21, and Five Year Average, 1916-20—concluded.**

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per ton.	Total Value.
	acres.	tons.	tons.	lb.	\$	\$
<b>British Columbia—con.</b>						
Grain hay.....1919	60,390	2.50	151,000	—	29.00	4,379,000
1920	60,612	2.25	136,400	—	33.12	4,518,000
1921	57,603	2.70	155,500	—	20.20	3,141,000
Averages.....1919-20	60,501	2.15	143,700	—	30.95	4,448,500
Alfalfa.....1916	12,600	2.88	36,000	—	15.00	540,000
1917	8,681	2.58	22,400	—	22.92	513,400
1918	12,288	3.25	39,900	—	32.25	1,286,800
1919	13,331	3.00	40,000	—	37.00	1,480,000
1920	13,478	3.00	40,400	—	33.71	1,361,900
1921	12,785	3.70	47,300	—	23.70	1,121,000
Averages.....1916-20	12,072	2.95	35,740	—	29.00	1,036,420
Fodder corn.....1916	450	10.00	4,500	—	7.00	32,000
1917	2,239	7.00	15,700	—	15.00	235,500
1918	2,016	10.10	20,400	—	10.00	204,000
1919	4,368	11.50	50,000	—	12.00	600,000
1920	4,713	11.50	54,200	—	17.75	962,000
1921	4,741	9.85	46,700	—	14.50	677,000
Averages.....1916-20	2,751	10.50	28,960	—	14.04	406,700

**Area under Pasture in Canada, 1918-21.**—Table 2 shows the estimated area under pasture in seven of the provinces of Canada for each of the years 1918 to 1921. The figures are derived from the annual statistics of agriculture collected jointly by the Dominion Bureau of Statistics and the Provincial Departments of Agriculture, and published in the Monthly Bulletin of Agricultural Statistics for December, 1921, p. 491.

**2.—Area under Pasture in Canada, 1918-1921.**

Province.	1918.	1919.	1920.	1921.
	acres.	acres.	acres.	acres.
Prince Edward Island.....	217,927	233,982	247,360	250,093
Nova Scotia.....	1,199,091	1,177,099	1,075,827	955,030
New Brunswick.....	610,799	723,972	663,012	613,030
Quebec.....	4,764,548	3,893,777	3,869,696	4,016,725
Ontario.....	3,561,754	3,499,802	3,432,620	3,401,998
Saskatchewan.....	933,862	831,592	784,234	678,815
British Columbia.....	45,000	61,220	61,942	61,508
Total for the seven provinces.....	11,332,981	10,421,444	10,134,691	9,977,204

The "range pasture" in British Columbia was estimated at 891,249 acres in 1921, as compared with 847,720 acres in 1920. For 1920 and 1921 the estimates in the table are subject to correction by the data of the Census of 1921.

3.—Annual Average Yields per acre of Field Crops for Canada and by Provinces from 1915 to 1921, with Decennial Averages for the years 1911-20.

Field Crops.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	Ten-year average 1911-1920.
	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
<b>Canada—</b>								
Fall wheat.....	28.50	21.50	21.50	19.00	23.75	24.00	21.50	23.00
Spring wheat.....	25.75	16.75	15.50	10.75	9.50	14.00	12.75	16.25
All wheat.....	28.00	17.00	15.75	11.00	10.00	14.50	13.00	16.50
Oats.....	40.25	37.25	30.25	28.75	26.25	33.50	25.25	33.75
Barley.....	31.50	23.75	23.00	24.50	21.25	24.75	21.25	25.75
Rye.....	20.50	19.50	18.25	15.25	13.50	17.50	11.75	16.50
Peas.....	17.75	14.50	15.25	13.25	14.75	19.00	14.25	16.50
Beans.....	16.75	12.75	13.75	15.50	16.50	17.50	17.50	16.25
Buckwheat.....	23.00	17.50	18.00	20.75	23.50	23.75	22.75	22.25
Mixed grain.....	37.50	25.75	32.50	38.75	31.00	40.00	25.75	34.50
Flax.....	13.25	12.50	6.50	5.75	5.00	5.60	7.75	9.00
Corn for husking.....	56.75	36.25	33.00	56.75	64.00	49.25	50.25	53.75
Potatoes.....	124.25	133.75	121.50	142.00	153.50	170.50	152.75	151.25
Turnips, etc.....	384.00	264.25	290.75	377.50	354.00	401.00	347.75	363.75
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.36	1.86	1.66	1.40	1.55	1.30	1.07	1.50
Fodder corn.....	10.17	6.65	7.34	9.50	9.75	9.60	10.75	9.15
Sugar beets.....	7.83	4.75	8.40	10.00	9.80	11.37	9.45	9.30
Alfalfa.....	2.65	2.91	2.29	2.25	2.20	2.45	2.50	2.45
<b>Prince Edward Island—</b>								
Spring wheat.....	19.00	16.75	14.50	20.00	17.00	12.00	16.75	18.00
Oats.....	34.75	37.25	32.25	34.50	34.00	27.75	27.00	34.75
Barley.....	29.00	29.25	28.50	28.50	29.00	24.50	23.25	28.00
Peas.....	15.75	22.25	14.00	16.00	16.00	16.50	23.50	18.25
Buckwheat.....	29.00	27.25	29.00	21.75	20.75	23.50	24.75	26.25
Mixed grain.....	38.75	41.25	38.25	44.50	44.00	33.75	29.25	40.75
Potatoes.....	114.75	206.00	175.00	170.00	126.00	170.00	162.00	174.75
Turnips, etc.....	449.50	477.00	505.50	520.50	518.00	481.75	570.00	485.25
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.77	1.70	1.55	1.50	1.80	1.25	0.80	1.55
Fodder corn.....	13.00	13.00	7.00	5.25	12.00	8.00	10.00	9.50
<b>Nova Scotia—</b>								
Spring wheat.....	18.50	19.50	15.75	22.25	19.50	19.50	15.50	20.00
Oats.....	31.25	34.75	29.25	37.25	36.00	30.25	28.75	32.50
Barley.....	26.25	26.25	24.75	30.00	31.25	26.00	23.00	28.00
Rye.....	15.00	17.00	15.00	14.50	29.50	15.00	14.25	20.00
Peas.....	18.75	17.75	14.25	18.75	20.00	20.50	16.75	20.25
Beans.....	17.50	16.25	17.75	16.25	12.75	18.50	19.25	16.75
Buckwheat.....	21.75	24.50	21.00	23.00	25.25	22.25	20.50	23.75
Mixed grain.....	34.25	34.00	24.00	36.00	37.50	32.50	30.00	32.00
Potatoes.....	141.25	201.00	175.00	190.75	161.00	203.75	163.75	191.25
Turnips, etc.....	390.00	404.00	351.00	391.25	537.75	431.75	495.00	434.00
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.78	1.80	1.65	1.45	2.10	1.50	1.35	1.70
Fodder corn.....	4.64	8.75	9.20	9.50	9.50	8.00	6.50	8.70
Alfalfa.....	2.30	5.00	3.50	—	—	—	—	—
<b>New Brunswick—</b>								
Spring wheat.....	19.00	17.25	12.00	19.00	17.50	15.75	15.25	17.75
Oats.....	27.75	30.50	22.50	31.50	30.25	29.50	25.00	29.25
Barley.....	23.00	23.75	22.00	24.75	26.75	23.75	17.00	25.50
Peas.....	17.00	16.50	15.00	14.75	14.75	15.00	12.75	15.75
Beans.....	21.25	15.25	19.50	15.50	16.50	16.25	12.75	16.50
Buckwheat.....	22.75	22.75	19.50	20.75	25.00	22.75	22.25	24.00
Mixed grain.....	31.50	34.25	19.50	32.50	33.75	29.75	23.50	31.25
Potatoes.....	144.25	192.00	149.75	158.50	142.75	198.00	216.25	183.25
Turnips, etc.....	329.00	411.00	390.50	359.00	366.50	353.00	349.50	349.50
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.39	1.48	1.60	1.50	1.40	1.20	0.90	1.40
Fodder corn.....	7.00	10.00	9.00	4.50	5.00	8.00	7.00	6.15
<b>Quebec—</b>								
Spring wheat.....	20.00	15.00	14.00	17.25	16.75	17.00	15.25	16.50
Oats.....	30.25	22.75	21.75	27.25	26.75	30.25	21.25	27.50
Barley.....	26.50	20.00	18.50	24.00	22.75	25.25	21.25	23.25
Rye.....	16.75	14.25	16.75	16.25	17.25	18.75	17.25	16.75
Peas.....	16.50	14.00	12.00	15.50	15.00	17.00	14.75	15.25
Beans.....	22.00	17.75	15.00	17.00	19.75	18.00	18.75	17.25
Buckwheat.....	24.75	19.00	16.50	20.75	24.00	25.75	23.25	22.50
Mixed grain.....	29.75	20.25	21.25	27.00	27.00	29.25	24.00	26.75
Flax.....	12.00	10.50	8.25	11.25	9.75	11.50	11.50	10.50



**3.—Annual Average Yields per acre of Field Crops for Canada and by Provinces from 1915 to 1921, with Decennial Averages for the years 1911-20—continued.**

Field Crops.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	Ten-year average 1911-1920.
	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
<b>Quebec—con.</b>								
Corn for husking.....	31.25	24.75	24.25	21.75	41.00	29.75	29.50	28.50
Potatoes.....	149.75	131.00	80.00	147.00	181.50	185.50	162.50	153.00
Turnips, etc.....	308.25	265.00	224.50	295.50	317.50	329.25	319.00	294.50
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.26	1.75	1.71	1.50	1.50	1.25	0.95	1.50
Fodder corn.....	8.61	8.00	8.50	7.25	8.25	8.00	9.00	8.00
Alfalfa.....	2.84	2.65	2.26	2.25	2.35	2.40	2.20	2.50
<b>Ontario—</b>	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	28.25	21.25	21.50	19.50	24.30	24.30	22.00	23.00
Spring wheat.....	22.25	16.25	19.50	23.25	15.60	16.80	12.50	18.75
All wheat.....	27.75	20.75	21.25	21.25	21.20	22.30	20.10	22.00
Oats.....	39.75	25.50	36.50	45.00	29.30	44.90	23.40	36.25
Barley.....	34.25	23.00	31.60	36.75	23.10	34.40	22.00	30.25
Rye.....	20.00	17.50	17.75	16.00	15.80	17.70	14.50	17.50
Peas.....	17.75	11.25	16.75	21.00	14.30	20.20	13.60	16.75
Beans.....	16.00	11.75	11.75	13.75	12.60	16.70	16.10	15.50
Buckwheat.....	21.75	14.50	18.75	20.50	22.80	22.30	22.70	21.25
Mixed grain.....	40.00	26.00	37.75	44.25	31.40	44.20	26.20	37.00
Flax.....	12.50	9.25	13.00	12.25	9.40	10.70	8.90	13.00
Corn for husking.....	58.50	37.25	37.25	66.75	68.60	53.00	54.00	57.25
Potatoes.....	92.75	61.00	133.75	118.50	96.30	152.10	93.80	119.25
Turnips, etc.....	394.50	211.00	341.00	460.25	348.00	493.00	351.25	391.00
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.32	2.00	1.70	1.32	1.59	1.26	1.11	1.45
Fodder corn.....	10.63	6.50	7.51	10.35	10.05	10.39	11.44	9.65
Sugar beets.....	7.83	4.75	8.40	10.00	9.80	11.37	9.45	9.30
Alfalfa.....	2.72	3.00	2.74	2.28	2.14	2.45	2.58	2.40
<b>Manitoba—</b>	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	23.25	16.00	22.25	18.00	—	—	—	—
Spring wheat.....	24.75	11.00	16.75	16.25	14.25	13.90	11.15	17.25
All wheat.....	24.75	11.00	16.75	16.25	14.25	13.90	11.15	17.25
Oats.....	38.50	33.50	30.25	31.75	31.25	30.75	22.27	34.50
Barley.....	29.50	20.00	22.50	25.25	19.25	21.00	18.87	24.50
Rye.....	18.00	18.50	17.25	16.25	13.75	15.50	13.83	15.50
Mixed grain.....	33.50	3.25	31.00	28.25	25.00	21.25	19.85	25.75
Flax.....	8.25	13.75	9.00	10.00	9.00	7.90	8.83	10.50
Potatoes.....	85.75	147.25	106.00	185.00	126.00	92.25	153.10	146.75
Turnips, etc.....	250.25	145.00	185.00	251.75	184.00	145.25	231.00	233.25
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.02	1.83	1.00	1.00	1.50	1.50	1.55	1.45
Fodder corn.....	2.63	2.75	4.86	5.59	6.80	4.40	7.20	5.65
Alfalfa.....	1.36	2.75	2.07	2.25	2.20	2.00	2.59	2.10
<b>Saskatchewan—</b>	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat.....	25.00	16.25	14.25	10.00	8.50	11.25	13.75	15.25
Oats.....	43.50	43.00	27.25	21.50	23.10	27.70	30.00	32.50
Barley.....	31.75	27.00	21.00	17.00	18.20	20.25	26.75	23.25
Rye.....	28.25	24.00	18.75	11.50	10.50	14.70	11.25	13.75
Peas.....	15.50	32.50	17.25	20.00	18.00	14.50	19.25	19.35
Mixed grains.....	25.25	35.00	32.00	21.00	35.00	33.50	30.00	31.00
Flax.....	13.25	12.25	6.25	5.00	4.80	5.00	7.50	8.90
Potatoes.....	110.25	155.75	133.00	170.00	170.00	127.50	176.50	147.25
Turnips, etc.....	233.00	253.00	155.50	225.75	257.75	301.00	169.50	255.25
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.39	2.35	1.42	1.15	1.05	1.40	1.60	1.35
Fodder corn.....	2.40	2.60	2.00	5.65	12.50	3.75	11.35	4.65
Alfalfa.....	1.83	2.85	1.61	1.40	1.60	2.25	3.00	1.90
<b>Alberta—</b>	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	31.25	30.25	20.50	15.00	15.75	18.75	17.25	22.25
Spring wheat.....	31.00	25.00	18.25	6.00	8.00	20.50	10.35	17.50
All wheat.....	31.00	25.00	18.25	6.00	8.00	20.50	10.35	17.75
Oats.....	46.00	48.00	34.00	22.75	23.75	37.25	22.00	37.00
Barley.....	32.25	29.00	22.00	16.50	25.50	26.50	20.50	25.75
Rye.....	23.50	24.50	20.50	17.25	14.00	21.25	9.00	20.00
Peas.....	20.00	20.00	17.50	18.00	18.00	17.00	24.00	17.75
Mixed grains.....	37.25	30.00	25.75	21.50	36.25	30.00	22.75	28.75
Flax.....	14.00	13.75	7.00	5.00	2.75	7.00	6.00	9.10
Potatoes.....	142.00	163.75	151.50	70.50	179.75	166.00	158.50	155.00
Turnips, etc.....	235.25	279.50	207.50	188.50	221.50	261.75	153.50	234.00

**3.—Annual Average Yields per acre of Field Crops for Canada and by Provinces from 1915 to 1921, with Decennial Averages for the years 1911-1920—concluded.**

Field Crops.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	Ten-year average 1911-1920.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
<b>Alberta—con.</b>								
Hay and clover.....	1.31	1.93	1.48	0.85	1.10	1.30	1.00	1.35
Fodder corn.....	3.42	2.56	1.00	5.50	5.58	4.25	10.00	3.20
Alfalfa.....	2.15	2.65	2.05	2.00	2.00	2.25	1.75	2.25
<b>British Columbia—</b>	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	33.50	30.75	31.75	24.75	24.75	19.25	27.25	27.50
Spring wheat.....	32.50	31.00	28.50	22.00	22.00	18.75	24.50	24.25
All wheat.....	32.75	31.00	29.00	22.50	22.75	19.00	25.25	25.25
Oats.....	61.75	60.50	53.75	39.75	47.25	34.75	48.75	52.75
Barley.....	40.25	45.75	29.25	26.50	33.00	37.75	34.75	35.00
Peas.....	29.75	33.75	23.75	21.50	23.00	26.00	25.00	26.75
Mixed grains.....	40.00	50.00	40.00	21.50	36.50	36.00	34.00	39.75
Potatoes.....	247.25	189.00	166.50	228.00	170.00	165.00	176.00	203.50
Turnips, etc.....	455.50	500.00	344.50	422.00	365.00	435.00	366.00	435.25
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	2.34	2.67	1.85	1.90	1.50	2.00	2.30	2.10
Fodder corn.....	12.62	10.00	7.00	10.10	11.50	11.50	9.85	10.25
Alfalfa.....	3.52	2.88	2.58	3.25	3.00	3.00	3.70	3.40

**4.—Areas and Yields of Wheat, Oats, Barley, Rye and Flaxseed in the three Prairie Provinces, 1919-21.**

Provinces.	1919.	1920.	1921.	1919.	1920.	1921.
	acres.	acres.	acres.	bush.	bush.	bush.
<b>Prairie Provinces—</b>						
Wheat.....	17,750,167	16,841,174	22,181,329	165,544,300	234,138,300	280,098,000
Oats.....	9,452,386	10,070,476	10,819,641	235,580,000	314,297,000	284,147,500
Barley.....	1,800,745	1,838,791	2,109,065	36,682,400	40,760,500	44,681,600
Rye.....	573,218	482,011	1,688,228	7,262,400	8,273,600	19,109,700
Flax.....	1,068,014	1,391,076	516,972	5,232,300	7,588,800	3,945,700
<b>Manitoba—</b>						
Wheat.....	2,880,301	2,705,622	3,501,217	40,975,300	37,542,000	39,054,000
Oats.....	1,847,267	1,873,954	2,226,376	57,698,000	57,657,000	49,442,500
Barley.....	893,947	839,078	1,043,144	17,149,400	17,520,000	19,681,600
Rye.....	298,932	148,602	257,793	4,089,400	2,818,600	3,564,700
Flax.....	57,379	146,455	61,689	520,300	1,157,800	544,700
<b>Saskatchewan—</b>						
Wheat.....	10,587,363	10,061,069	13,556,708	89,994,000	113,135,300	188,000,000
Oats.....	4,837,747	5,106,822	5,681,522	112,157,000	141,549,000	170,513,000
Barley.....	492,586	519,014	497,730	8,971,000	10,501,500	13,343,000
Rye.....	190,482	172,449	1,208,299	2,000,000	2,535,000	13,546,000
Flax.....	929,945	1,140,921	426,849	4,490,000	5,705,000	3,230,000
<b>Alberta—</b>						
Wheat.....	4,282,503	4,074,483	5,123,404	34,575,000	83,461,000	53,044,000
Oats.....	2,767,372	3,089,700	2,911,743	65,725,000	115,091,000	64,192,000
Barley.....	414,212	430,699	568,191	10,562,000	12,739,000	11,657,000
Rye.....	83,804	160,960	222,136	1,173,000	3,420,000	1,999,000
Flax.....	80,690	103,700	28,434	222,000	726,000	171,000

## 5.—Total Areas and Values of Field Crops in Canada, 1916-21.

AREAS.						
Provinces.	1916.	1917.	1918.	1919.	1920.	1921.
	acres.	acres.	acres.	acres.	acres.	acres.
<b>Canada</b> .....	<b>38,930,333</b>	<b>42,602,288</b>	<b>51,427,190</b>	<b>53,049,640</b>	<b>52,830,865</b>	<b>59,635,346</b>
P. E. Island.....	485,910	491,210	488,180	526,628	536,105	552,184
Nova Scotia.....	746,580	752,980	910,387	1,011,144	919,547	807,858
New Brunswick.....	889,220	888,125	1,188,200	1,335,118	1,253,834	1,171,305
Quebec.....	4,590,200	5,778,139	8,201,362	7,973,021	7,905,987	8,051,989
Ontario.....	7,637,500	8,233,500	10,000,063	9,915,884	10,108,272	10,075,073
Manitoba.....	5,030,960	4,837,660	6,325,150	6,344,318	6,020,310	7,421,786
Saskatchewan.....	13,850,769	14,678,042	16,332,872	17,430,554	17,347,901	21,774,483
Alberta.....	5,409,544	6,692,616	7,739,391	8,170,971	8,389,521	9,417,870
British Columbia.....	289,650	250,016	241,585	342,002	349,388	362,798
VALUES.						
	\$	\$	\$	\$	\$	\$
<b>Canada</b> .....	<b>886,494,900</b>	<b>1,144,636,450</b>	<b>1,372,935,970</b>	<b>1,537,170,100</b>	<b>1,455,244,050</b>	<b>931,863,670</b>
P. E. Island.....	14,124,100	16,530,000	16,277,800	22,367,400	18,530,400	14,202,970
Nova Scotia.....	22,369,800	23,313,400	42,486,200	63,357,000	47,846,550	29,556,400
New Brunswick.....	22,924,200	24,404,200	42,891,270	53,134,400	46,357,300	38,325,400
Quebec.....	102,937,300	153,197,900	276,776,900	309,963,000	330,251,000	219,154,000
Ontario.....	190,646,000	251,095,100	384,013,900	383,573,900	375,746,900	239,627,400
Manitoba.....	76,749,000	137,470,750	180,507,500	182,097,200	133,989,900	72,135,500
Saskatchewan.....	292,773,900	349,488,200	299,362,100	340,029,800	271,213,000	215,635,000
Alberta.....	143,738,600	176,965,800	113,072,700	158,044,400	204,291,500	82,780,000
British Columbia.....	15,232,000	12,171,100	17,547,600	24,603,000	27,017,500	20,447,000

**Comparative Value of Field Crops, 1920 and 1921.**— In Table 6, the field crops of Canada for the year 1921 are compared with those of 1920 in respect of quantity and value. For the whole of the field crops the value in 1921 is less than in 1920 by \$443,413,000; that is to say, if the prices of 1920 had ruled the same as in 1921, the value of the field crops would have been \$1,375,276,000, instead of only \$931,863,000. The total decrease of \$523,381,000 is due chiefly to the decrease in prices amounting to \$443,413,000, but also to the fact that total quantities, principally in respect of oats, potatoes, roots and hay and clover, are smaller, representing the value of \$79,968,000. Rye, corn and alfalfa are the only crops showing an increase in total value, and this is due to larger yields. In the case of rye the reduction in value of \$13,227,000 is offset by the increase in production, amounting to \$13,540,000; so that the net difference is a small plus one of \$313,000. For grain hay in Alberta there was no record in 1920; so that although the amount of \$11,336,000 appears as an increase over 1920, this may not be so in reality. All the rest of the crops show a large decrease in value owing to the great fall in prices. For spring wheat the decrease due to lower prices, viz. \$230,460,000, is offset by an increase in quantity representing \$66,743,000. Of the decrease in the value of oats, viz. \$133,720,000, the sum of \$78,570,000 is due to lower prices and \$55,150,000 to smaller quantities, 1920, giving, it will be remembered, a bumper oat crop.

6.—Field Crops of Canada, compared as to Quantity and Value, 1920 and 1921.  
(''000" omitted).

Field Crops.	Actual Value 1921.	Value at prices of 1920.	Actual Value 1920.	Increase (+) or decrease (-).	Due to higher (+) or lower (-) prices.	Due to larger (+) or smaller (-) quantities.
	\$	\$	\$	\$	\$	\$
Fall wheat.....	15,846	29,137	36,550	- 20,704	- 13,291	- 7,413
Spring wheat.....	227,090	457,550	390,807	-163,717	-230,460	+66,743
All wheat.....	242,936	486,687	427,357	-184,421	-243,751	+59,330
Oats.....	146,395	224,965	280,115	-133,720	- 78,570	-55,150
Barley.....	28,254	49,702	52,821	- 24,567	- 21,448	- 3,119
Rye.....	15,399	28,626	15,086	+ 313	- 13,227	+13,540
Peas.....	5,439	6,700	8,534	- 3,095	- 1,261	- 1,834
Beans.....	3,156	4,236	4,918	- 1,762	- 1,080	- 682
Buckwheat.....	7,285	10,533	11,513	- 4,228	- 3,248	- 980
Mixed grains.....	13,901	20,083	29,236	- 15,335	- 6,182	- 9,153
Flaxseed.....	5,938	7,970	15,502	- 9,564	- 2,032	- 7,532
Corn for husking.....	12,317	17,252	16,594	- 4,277	- 4,935	+ 658
Potatoes.....	82,148	104,118	129,803	- 47,655	-21,970	-25,685
Turnips, mangolds, etc.....	26,620	32,786	48,213	- 21,593	- 6,166	-15,427
Hay and clover.....	267,764	296,671	348,166	- 80,402	-28,907	-51,495
Grain hay (B.C.).....	3,141	5,151	4,518	- 1,377	- 2,010	+ 633
Grain hay (Alta.).....	11,336	11,336	-	+ 11,336	-	+11,336
Alfalfa.....	13,211	15,753	13,888	- 677	- 2,542	+ 1,865
Fodder corn.....	44,881	49,277	43,701	+ 1,180	- 4,896	+ 5,576
Sugar beets.....	1,742	3,430	5,279	- 3,537	- 1,688	- 1,849
Totals.....	931,863	1,375,276	1,455,244	-523,381	-443,413	-79,968
Increase or decrease.....	-	-	-	per cent - 35.9	per cent -30.4	per cent - 5.5

Taking the field crops as a whole, the total value is less than in 1920 by 35.9 p.c., the decrease being caused by lower prices to the extent of 30.4 p.c. and by smaller quantities to the extent of 5.5 p.c.

**Quality of Grain Crops, 1912-1921.**—Table 7 gives the average weight per measured bushel for each of the principal grain crops from 1912 to 1921, with the ten-year average for the period 1911-1920.

7.—Quality of Grain Crops as indicated by Average Weight per measured bushel, 1912-21.

Crop.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	Ten year average, 1911-20.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Fall wheat.....	60.21	60.25	59.61	59.71	59.52	59.37	61.19	61.20	60.14	58.77	60.23
Spring wheat.....	58.90	60.37	59.46	60.31	56.51	59.48	58.69	58.53	59.07	58.10	59.05
All wheat.....	59.23	60.34	59.49	60.19	57.10	59.46	59.44	59.12	59.35	58.11	59.34
Oats.....	35.40	36.48	35.31	36.61	33.86	33.55	35.61	34.16	35.62	32.97	35.13
Barley.....	47.59	48.41	47.22	48.26	45.66	46.97	47.24	46.32	47.62	46.05	47.23
Rye.....	54.84	55.66	55.47	56.32	54.95	53.44	55.60	55.09	55.44	55.06	55.19
Peas.....	56.88	60.00	60.53	60.74	59.88	59.81	59.93	59.60	60.44	59.42	59.74
Beans.....	59.05	59.70	60.21	59.61	60.00	59.70	58.67	59.99	59.73	59.30	59.50
Buckwheat.....	47.62	50.32	48.20	48.02	46.35	46.49	47.41	47.23	47.95	47.35	47.69
Mixed grain.....	44.48	44.74	45.51	44.98	43.13	44.41	46.39	44.83	44.65	41.62	44.82
Flax.....	54.88	55.79	52.49	55.28	54.99	54.73	53.72	55.14	54.79	54.34	55.01
Corn, husking.....	55.67	56.27	56.62	56.32	56.51	56.18	53.97	-	56.45	55.56	55.92



The table shows that for fall wheat the weight in 1918 and 1919 was about 61.20 lb., which is above the decennial average of 60.23 lb. For spring wheat the average, 59.05 lb., was exceeded in five years out of the ten and for all wheat five years out of the ten, the average being 59.34 lb. The average of 35.13 lb. for oats was exceeded for six years out of the ten and for barley (average 47.23 lb.) five years out of the ten. For the remaining crops the decennial averages are as follows, the number of times the average was exceeded being placed within brackets; rye 55.19 lb. (5); peas 59.74 lb. (7); beans 59.50 lb. (7); buckwheat 47.69 lb. (4); mixed grains 44.82 lb. (4); flax 55.01 lb. (3); corn for husking 55.92 lb. (6).

**Average Values of Farm Land.**—Table 8 shows that in 1921 the average value of the occupied farm lands of Canada, which includes both improved and unimproved land, together with dwelling houses, barns, stables and other farm buildings, was returned as \$40 per acre, as compared with \$48 in 1920, \$46 in 1919, \$41 in 1918, \$38 in 1917, \$35 in 1916, \$37 in 1915, \$33 in 1914, \$32 in 1910, \$31 in 1909, and \$31 in 1908. By provinces, the value for 1921 was highest in British Columbia, viz., \$122. In the other provinces the average values of farm land per acre were reported as follows: Ontario \$63, Quebec \$59, Prince Edward Island \$46, Nova Scotia and Manitoba \$35, Saskatchewan \$29, New Brunswick and Alberta \$28. The average values per acre in 1921 of orchards and fruitlands, including buildings, etc., in the fruit growing districts of Nova Scotia, Ontario and British Columbia were reported as follows: Nova Scotia \$117, Ontario \$137, and British Columbia \$300.

8.—Average Values per acre of Occupied Farm Lands in Canada, as estimated by Crop Correspondents, 1908-10, 1914-21.

Provinces.	1908.	1909.	1910.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Canada.....	31	32	33	37	35	36	38	41	46	48	40
P. E. Island.....	34	32	31	39	38	39	44	44	51	49	46
Nova Scotia.....	25	31	25	28	28	34	34	36	41	43	35
New Brunswick.....	21	24	19	26	22	29	29	35	32	35	28
Quebec.....	42	43	43	47	51	52	53	57	72	70	59
Ontario.....	47	50	48	54	52	53	55	57	66	70	63
Manitoba.....	27	29	29	32	30	32	31	32	35	39	35
Saskatchewan.....	20	22	22	24	24	23	26	29	32	32	29
Alberta.....	18	20	24	21	23	22	27	28	29	32	28
British Columbia.....	76	73	74	150	125	119	149	149	174	175	122

**Average Wages of Farm Help.**—For the year 1920 the average wages of farm help were the highest on record. For 1921 the returns showed a very substantial reduction. For the whole of Canada the average wages per month of farm helpers during the summer season of 1921 were for men \$67 and for women \$42, including board, the average value of which was \$22 per month for men and \$18 per month for women. In 1920 the corresponding averages were: \$86 for men, including board value \$26, and \$47 for women, including board value \$20. For the complete year 1921 the average value of wages and board was \$669 for men and \$449 for women, as compared with \$821 for men and \$492 for women in 1920. By provinces, the average

wages per month for men and women, respectively, in the summer season and including board, were in 1921 as follows, the figures for 1920 being given within brackets: Prince Edward Island \$45 and \$27 (\$60 and \$32); Nova Scotia, \$56 and \$31 (\$73 and \$38); New Brunswick, \$54 and \$31 (\$79 and \$35); Quebec, \$58 and \$32 (\$86 and \$40); Ontario, \$60 and \$38 (\$75 and \$44); Manitoba, \$79 and \$50 (\$98 and \$58); Saskatchewan, \$80 and \$51 (\$102 and \$60); Alberta, \$78 and \$54 (\$107 and \$62); British Columbia \$79 and \$54 (\$95 and \$63).

In Table 9 the total value of wages and board is given for 1921, as compared with previous years, and in Table 10 the value of the yearly board for 1921 as compared with 1920 is given separately.

9.—Average Wages of Farm Help in Canada, as estimated by Crop Correspondents, 1915-21.

Provinces.	Males per month in summer season.			Females per month in summer season.			Males per year.	Females per year.
	Wages.	Board.	Wages and Board.	Wages.	Board.	Wages and board.	Wages and board.	Wages and board.
Canada.....	\$	\$	\$	\$	\$	\$	\$	\$
1915	22	15	37	9	11	20	341	200
1916	26	17	43	9	13	22	397	228
1917	45	19	64	19	15	34	611	364
1918	49	21	70	21	17	38	681	416
1919	54	24	78	24	19	43	764	465
1920	60	26	86	27	20	47	821	492
1921	45	22	67	24	18	42	669	449
P. E. Island.....								
1915	17	10	27	6	9	15	238	137
1916	18	13	31	9	9	18	301	167
1917	26	14	40	13	10	23	407	254
1918	31	15	46	14	11	25	469	289
1919	33	18	51	15	13	28	504	318
1920	42	18	60	18	14	32	572	372
1921	29	16	45	15	12	27	460	287
Nova Scotia.....								
1915	21	12	33	8	8	16	310	169
1916	23	16	39	8	11	19	365	195
1917	37	17	54	14	12	26	543	296
1918	41	19	60	16	14	30	590	326
1919	47	22	69	18	16	34	628	346
1920	49	24	73	21	17	38	735	408
1921	36	20	56	17	14	31	592	352
New Brunswick.....								
1915	20	14	34	8	8	16	308	153
1916	22	14	36	7	10	17	328	164
1917	39	18	57	15	13	28	572	306
1918	49	20	69	17	14	31	725	335
1919	56	23	79	20	15	35	804	401
1920	56	23	79	19	16	35	785	391
1921	35	19	54	17	14	31	575	332
Quebec.....								
1915	20	13	33	6	10	16	301	159
1916	25	16	41	9	11	20	371	196
1917	42	17	59	17	12	29	523	287
1918	45	20	65	20	13	33	575	317
1919	53	23	76	22	15	37	695	372
1920	62	24	86	24	16	40	767	407
1921	39	19	58	18	14	32	559	335
Ontario.....								
1915	18	13	31	6	11	17	304	179
1916	23	16	39	19	13	32	360	206
1917	41	18	59	18	14	32	551	344
1918	42	20	62	19	16	35	607	352
1919	48	22	70	22	18	40	691	431
1920	52	23	75	25	19	44	736	470
1921	40	20	60	22	16	38	609	418

**9.—Average Wages of Farm Help in Canada, as estimated by Crop Correspondents, 1915-21—concluded.**

Provinces.		Males per month in summer season.			Females per month in summer season.			Males per year.	Females per year.
		Wages.	Board.	Wages and board.	Wages.	Board.	Wages and board.	Wages and board.	Wages and board.
		\$	\$	\$	\$	\$	\$	\$	\$
Manitoba.....	1915	30	15	45	14	13	27	390	245
	1916	30	18	48	12	15	27	454	283
	1917	47	21	68	23	17	40	689	452
	1918	55	23	78	26	19	45	791	494
	1919	63	26	89	32	20	52	889	557
	1920	70	28	98	34	24	58	975	559
	1921	53	26	79	28	22	50	798	552
Saskatchewan.....	1915	25	17	42	10	14	24	386	241
	1916	31	18	49	11	15	26	434	278
	1917	50	23	73	23	18	41	734	470
	1918	61	25	86	29	20	49	849	545
	1919	66	28	94	32	23	55	912	598
	1920	72	30	102	35	25	60	1,003	653
	1921	54	26	80	29	29	51	795	556
Alberta.....	1915	27	17	44	10	14	24	404	253
	1916	32	20	52	13	16	29	501	299
	1917	53	23	76	25	19	44	784	476
	1918	60	26	86	28	22	50	863	569
	1919	67	28	95	34	24	58	976	648
	1920	76	31	107	36	26	62	1,038	638
	1921	52	26	78	31	23	54	746	566
British Columbia .....	1915	30	19	49	15	16	31	463	287
	1916	28	22	50	11	18	29	543	325
	1917	53	25	78	27	21	48	803	481
	1918	61	28	89	34	23	57	903	589
	1919	65	31	96	37	27	64	1,065	715
	1920	64	31	95	36	27	63	1,033	742
	1921	52	27	79	31	23	54	855	613

**10.—Average Wages per Year of Farm Help in Canada, as estimated by Crop Correspondents, 1920 and 1921.**

Provinces.		Males.			Females.		
		Wages.	Board.	Wages and board.	Wages.	Board.	Wages and board.
		\$	\$	\$	\$	\$	\$
Canada.....	1920	543	278	821	275	217	492
	1921	421	248	669	249	200	449
Prince Edward Island.....	1920	371	201	572	212	160	372
	1921	282	178	460	151	136	287
Nova Scotia.....	1920	472	263	735	218	190	408
	1921	364	228	592	182	170	352
New Brunswick.....	1920	531	254	785	213	178	391
	1921	361	214	575	183	149	332
Quebec.....	1920	524	243	767	235	172	407
	1921	360	199	559	193	142	335
Ontario.....	1920	474	262	736	259	211	470
	1921	382	227	609	233	185	418
Manitoba.....	1920	650	325	975	312	247	559
	1921	503	295	798	303	249	552
Saskatchewan.....	1920	667	336	1,003	364	289	653
	1921	498	297	795	302	254	556
Alberta.....	1920	697	341	1,038	360	278	638
	1921	463	283	746	318	248	566
British Columbia.....	1920	684	349	1,033	431	311	742
	1921	552	303	855	353	260	613

## STATISTICS OF FARM LIVE STOCK.

**Numbers of Farm Animals.**—In Table 11 are given by provinces the number of each description of farm live stock in Canada for the year 1921, as compared with 1920, according to estimates made jointly by the statistical authorities of the Dominion and Provincial Governments. The total number of horses in Canada on June 15, 1921, was estimated at 3,813,921, as compared with 3,400,352 in 1920. Mules numbered 10,424, as against 9,055 in 1920. Cattle numbered 10,206,205, as against 9,572,196; sheep 3,675,860 as against 3,720,783, and swine 3,904,895, as against 3,516,678. All descriptions therefore increased since 1920, excepting sheep, which for the first time since 1917 showed a decrease, this amounting to 44,923. Poultry showed large increases, as compared with 1920, hens from 25,942,105 to 34,340,474; turkeys from 791,766 to 1,199,494; geese from 754,455 to 880,014 and ducks from 617,638 to 762,135. Rabbits in British Columbia numbered 65,789, as against 82,146. By provinces, horses increased in the Prairie Provinces and in British Columbia, but decreased in the remaining provinces. Cattle increased in all parts, except the Maritime Provinces and Quebec. Sheep decreased, except in Prince Edward Island, Saskatchewan, Alberta and British Columbia, where there was an increase. Swine decreased in the Maritime Provinces, Ontario and British Columbia, and increased in the other provinces. Poultry increased, except only in Nova Scotia and New Brunswick. As in the case of field crops, the differences were due partly to correction by census data and partly to actual change.

## 11.—Numbers of Farm Live Stock in Canada, by Provinces, 1920 and 1921.

Classification.—HORSES: Stallions, Mares and Geldings, 2 years old and over; Colts and Fillies, under 2 years. CATTLE: Bulls for breeding; Milch Cows; Calves, under 1 year; Steers, 2 years old and over; All other cattle.

Province.	1920.	1921.	Province.	1920.	1921.
No.	No.	No.	No.	No.	No.
<b>Canada—</b>			<b>Canada—con.</b>		
Horses—			Swine.....	3,516,678	3,904,895
Stallions.....	44,401 <sup>1</sup>	42,811	Poultry—		
Mares.....	1,504,462	1,746,580	Hens.....	25,942,105	34,340,474
Geldings.....	1,315,968 <sup>2</sup>	1,545,002	Turkeys.....	791,766 <sup>3</sup>	1,199,494
Colts and fillies.....	535,521	479,528	Geese.....	754,455 <sup>3</sup>	880,014
Total.....	3,400,352	3,813,921	Ducks.....	617,638 <sup>3</sup>	762,135
			Total.....	30,505,819 <sup>4</sup>	37,182,117
Mules—	9,055	10,424	Rabbits (British Columbia only).....	82,146	65,789
Cattle—			<b>P.E. Island—</b>		
Bulls.....	282,228	285,372	Horses—		
Milch cows.....	3,504,692	3,736,832	Stallions.....	80	88
Calves.....	2,158,635	2,321,732	Mares.....	18,630	14,515
Steers.....	782,132	881,223	Geldings.....	13,427	13,410
Other cattle.....	2,844,509	2,981,046	Colts and fillies.....	3,432	3,568
Total.....	9,572,196	10,206,205	Total.....	35,569	31,311
Sheep.....	3,720,783	3,675,860			

<sup>1</sup>Excluding stallions in New Brunswick.<sup>2</sup>Including stallions in New Brunswick.<sup>3</sup>Not including Alberta.<sup>4</sup>Including 2,399,855 poultry of all kinds in Alberta.



## 11.—Numbers of Farm Live Stock in Canada, by Provinces, 1920 and 1921—continued.

Province.	1920.	1921.	Province.	1920.	1921.
No.	No.	No.	No.	No.	No.
<b>P.E. Island—con.</b>			<b>New Brunswick—con.</b>		
Cattle—			Poultry—		
Bulls.....	4,958	3,195	Hens.....	701,987	679,542
Milch cows.....	49,932	55,022	Turkeys.....	22,192	29,452
Calves.....	36,297	29,878	Geese.....	20,142	22,585
Steers.....	5,277	7,043	Ducks.....	8,913	11,826
Other cattle.....	42,679	43,057	Total.....	753,234	743,405
Total.....	139,143	138,195			
Sheep.....	128,529	131,763	<b>Quebec—</b>		
Swine.....	49,917	42,447	Horses—		
Poultry—			Stallions.....	9,040	7,264
Hens.....	611,399	647,088	Mares.....	196,043	197,546
Turkeys.....	6,482	4,153	Colts and fillies.....	57,323	34,976
Geese.....	22,654	27,069	Geldings.....	170,793	167,173
Ducks.....	9,282	11,133	Total.....	433,199	406,959
Total.....	649,817	689,443	Cattle—		
<b>Nova Scotia—</b>			Bulls.....	119,394	105,041
Horses—			Milch cows.....	1,030,809	1,039,389
Stallions.....	1,226	974	Calves.....	449,394	441,701
Mares.....	36,244	32,555	Steers.....	75,431	66,633
Geldings.....	26,635	24,603	Other cattle.....	457,184	399,730
Colts and fillies.....	3,748	3,189	Total.....	2,132,212	2,052,494
Total.....	67,853	61,321	Sheep.....	1,031,982	1,006,620
Cattle—			Swine.....	836,431	883,920
Bulls.....	5,979	5,065	Poultry—		
Milch cows.....	170,308	143,780	Hens.....	3,177,402	3,476,729
Calves.....	79,379	68,137	Turkeys.....	114,377	146,004
Steers.....	43,936	38,080	Geese.....	130,384	129,864
Other cattle.....	98,859	78,230	Ducks.....	115,697	80,618
Total.....	398,461	333,292	Total.....	3,537,860	3,833,215
Sheep.....	403,567	324,260	<b>Ontario—</b>		
Swine.....	57,950	52,064	Horses—		
Poultry—			Stallions.....	3,902	3,665
Hens.....	805,328	708,753	Mares.....	351,517	353,075
Turkeys.....	6,283	7,853	Geldings.....	266,477	272,087
Geese.....	16,532	13,460	Colts and fillies.....	82,744	65,410
Ducks.....	10,543	10,678	Total.....	704,640	694,237
Total.....	838,686	740,744	Cattle—		
<b>New Brunswick—</b>			Bulls.....	65,757	67,759
Horses—			Milch cows.....	1,170,010	1,204,270
Stallions.....	—	3,011	Calves.....	655,316	651,532
Mares.....	38,242	34,702	Steers.....	245,706	249,099
Geldings.....	32,894 <sup>1</sup>	28,093	Other cattle.....	745,038	717,453
Colts and fillies.....	5,601	4,152	Total.....	2,881,827	2,890,113
Total.....	76,737	69,958	Sheep.....	1,129,084	1,081,828
Cattle—			Swine.....	1,614,356	1,563,807
Bulls.....	11,226	9,954	Poultry—		
Milch cows.....	147,760	139,055	Hens.....	10,030,872	10,389,852
Calves.....	70,737	58,845	Turkeys.....	267,583	291,377
Steers.....	26,049	22,877	Geese.....	395,238	413,219
Other cattle.....	77,216	64,715	Ducks.....	311,652	363,758
Total.....	332,988	295,446	Total.....	11,005,645	11,458,206
Sheep.....	280,090	236,951			
Swine.....	92,925	89,337			

<sup>1</sup>Including stallions.

## 11.—Numbers of Farm Live Stock in Canada, by Provinces, 1920 and 1921—concluded.

Province.	1920.	1921.	Province.	1920.	1921.
No.	No.	No.	No.	No.	No.
<b>Manitoba—</b>			<b>Alberta—</b>		
Horses—			Horses—		
Stallions.....	1,500	1,500	Stallions.....	15,810	11,848
Mares.....	158,114	191,159	Mares.....	303,531	398,015
Geldings.....	141,246	173,433	Geldings.....	277,250	360,362
Colts and fillies.....	55,768	53,697	Colts and fillies.....	145,260	146,285
Total.....	356,628	419,789	Total.....	741,851	916,510
Cattle—			Cattle—		
Bulls.....	16,734	20,493	Bulls.....	26,384	36,964
Milch cows.....	221,785	251,799	Milch cows.....	305,607	423,838
Calves.....	177,272	191,979	Calves.....	321,547	441,806
Steers.....	83,769	83,567	Steers.....	171,216	246,446
Other cattle.....	258,414	269,921	Other cattle.....	531,187	705,148
Total.....	757,974	817,759	Total.....	1,355,941	1,854,202
Sheep.....	156,716	131,361	Sheep.....	383,424	523,599
Swine.....	212,542	224,704	Swine.....	286,556	574,318
Poultry—			Poultry—		
Hens.....	3,100,000	3,449,598	Hens.....	2,399,855	4,534,042
Turkeys.....	145,000	172,830	Turkeys.....		283,346
Geese.....	64,500	69,171	Geese.....		83,363
Ducks.....	64,000	61,015	Ducks.....		62,814
Total.....	3,373,500	3,752,614	Total.....	2,399,855	4,963,565
<b>Saskatchewan—</b>			<b>British Columbia—</b>		
Horses—			Horses—		
Stallions.....	12,018	13,612	Stallions.....	825	849
Mares.....	383,300	505,905	Mares.....	18,841	19,108
Geldings.....	369,518	487,813	Geldings.....	17,728	18,298
Colts and fillies.....	174,969	161,948	Colts and fillies.....	6,676	6,303
Total.....	939,805	1,169,278	Total.....	44,070	44,558
Mules.....	8,475	10,111	Mules.....	580	313
Cattle—			Cattle—		
Bulls.....	27,534	32,405	Bulls.....	4,262	4,496
Milch cows.....	354,507	421,706	Milch cows.....	53,974	57,973
Calves.....	326,308	389,126	Calves.....	42,385	48,728
Steers.....	130,748	167,478	Steers.....	—	—
Other cattle.....	484,965	552,617	Other cattle.....	148,967	150,175
Total.....	1,324,062	1,563,332	Total.....	249,588	261,372
Sheep.....	160,918	188,021	Sheep.....	46,473	51,457
Swine.....	321,900	432,776	Swine.....	44,101	41,522
Poultry—			Poultry—		
Hens.....	6,217,518	9,051,788	Hens.....	1,297,599	1,403,082
Turkeys.....	221,691	255,923	Turkeys.....	7,858	8,556
Geese.....	92,743	109,365	Geese.....	12,262	11,918
Ducks.....	75,188	136,933	Ducks.....	22,363	23,360
Total.....	6,607,140	9,554,009	Total.....	1,340,082	1,446,916
			Rabbits.....	82,146	65,789

## 12.—Estimated Numbers of Farm Live Stock, 1916-1921.

Live Stock.	1916.	1917.	1918.	1919.	1920.	1921.
<b>Canada—</b>	No.	No.	No.	No.	No.	No.
Horses.....	3,246,430	3,412,749	3,609,257	3,667,369	3,400,352	3,813,921
Milch cows.....	2,835,552	3,202,283	3,538,600	3,548,437	3,504,692	3,736,832
Other cattle.....	3,763,155	4,718,657	6,507,267	6,536,574	6,067,504	6,469,373
Total cattle.....	6,598,707	7,920,940	10,045,867	10,085,011	9,572,196	10,206,205
Sheep.....	2,025,023	2,369,358	3,052,748	3,421,958	3,720,783	3,675,860
Swine.....	3,484,982	3,619,382	4,289,682	4,040,070	3,516,678	3,904,895
<b>Prince Edward Island—</b>						
Horses.....	38,562	38,948	32,620	34,576	35,569	31,311
Milch cows.....	46,032	46,032	41,429	45,662	49,932	55,022
Other cattle.....	57,260	54,970	69,092	79,815	89,211	83,173
Total cattle.....	103,292	101,002	110,521	125,477	139,143	138,195
Sheep.....	88,797	90,573	73,046	114,955	128,529	131,763
Swine.....	38,300	35,236	40,814	49,510	49,917	42,447
<b>Nova Scotia—</b>						
Horses.....	64,193	64,193	70,101	69,589	67,853	61,321
Milch cows.....	130,141	131,442	157,829	162,230	170,308	143,780
Other cattle.....	140,673	135,046	249,422	243,531	228,153	189,512
Total cattle.....	270,814	266,488	407,251	406,061	398,461	333,292
Sheep.....	200,979	200,979	259,847	261,529	403,567	324,260
Swine.....	51,928	49,850	68,238	69,982	57,950	52,064
<b>New Brunswick—</b>						
Horses.....	65,169	65,169	66,590	77,828	76,737	69,958
Milch cows.....	100,221	100,221	120,123	153,058	147,760	139,055
Other cattle.....	92,223	89,456	166,624	211,964	185,228	156,391
Total cattle.....	192,444	189,677	286,747	365,022	332,988	295,446
Sheep.....	105,997	103,877	140,015	212,745	280,090	236,951
Swine.....	70,683	69,269	79,814	104,939	92,925	89,337
<b>Quebec—</b>						
Horses.....	332,628	379,276	496,811	463,902	493,199	406,959
Milch cows.....	639,805	911,023	1,163,865	1,056,347	1,030,809	1,039,389
Other cattle.....	535,693	958,010	1,245,819	1,213,297	1,101,403	1,013,105
Total cattle.....	1,175,498	1,869,033	2,409,684	2,269,644	2,132,212	2,052,494
Sheep.....	497,711	849,148	959,070	1,007,425	1,031,982	1,006,620
Swine.....	531,303	712,087	997,255	935,425	836,431	883,920
<b>Ontario—</b>						
Horses.....	896,208	887,246	732,977	719,569	704,640	694,237
Milch cows.....	1,082,119	1,082,119	1,097,039	1,141,016	1,170,010	1,204,270
Other cattle.....	901,924	865,847	1,770,683	1,786,175	1,711,817	1,685,843
Total cattle.....	1,984,043	1,947,966	2,867,722	2,927,191	2,881,827	2,890,113
Sheep.....	589,581	595,477	972,341	1,101,740	1,129,084	1,081,828
Swine.....	1,404,618	1,236,064	1,656,386	1,695,487	1,614,356	1,563,807
<b>Manitoba—</b>						
Horses.....	324,707	324,175	384,772	379,356	356,628	419,789
Milch cows.....	197,825	202,177	225,659	227,872	221,785	251,799
Other cattle.....	359,259	357,870	521,240	553,899	536,189	565,960
Total cattle.....	557,084	560,047	746,899	781,771	757,974	817,759
Sheep.....	76,762	80,588	136,782	167,170	156,716	131,361
Swine.....	216,040	175,013	284,596	261,542	212,542	224,704
<b>Saskatchewan—</b>						
Horses.....	834,189	880,301	990,009	1,078,452	939,805	1,169,278
Milch cows.....	322,767	354,403	352,989	374,062	354,507	421,706
Other cattle.....	690,256	856,687	926,342	1,005,501	969,555	1,141,626
Total cattle.....	1,013,023	1,211,090	1,279,331	1,379,563	1,324,062	1,563,332
Sheep.....	124,237	127,892	134,177	146,911	160,118	188,021
Swine.....	530,727	573,938	521,240	432,367	321,900	432,776
<b>Alberta—</b>						
Horses.....	629,462	718,317	791,246	800,380	741,851	916,510
Milch cows.....	277,324	325,861	328,702	336,596	305,607	423,838
Other cattle.....	882,766	1,209,433	1,362,880	1,247,448	1,050,334	1,430,364
Total cattle.....	1,160,090	1,535,294	1,691,582	1,584,044	1,355,941	1,854,202
Sheep.....	294,690	276,966	332,179	364,498	333,424	523,599
Swine.....	603,554	730,237	601,534	445,858	286,556	574,318
<b>British Columbia—</b>						
Horses.....	61,312	55,124	44,131	43,717	44,070	44,558
Milch cows.....	39,313	49,005	50,965	51,594	53,974	57,973
Other cattle.....	103,101	191,338	195,165	194,644	195,614	203,399
Total cattle.....	142,419	240,343	246,130	245,238	249,588	261,372
Sheep.....	46,269	43,858	45,291	44,985	46,473	61,457
Swine.....	37,829	37,688	39,805	44,960	44,101	41,522

**Values of Farm Live Stock.**—The average values for all descriptions of farm live stock (Tables 13 and 14) showed in 1921 an extraordinary decrease as compared with 1920, and they were also below the values which were ruling before the war. For horses, the values were the lowest on record since these annual returns were begun in 1909. For Canada as a whole, horses under one year averaged \$38, as against \$49 in 1920; horses one year to under three years \$79, against \$102; and horses three years old and over \$123, as against \$151. Cattle under one year were \$12, as against \$20; cattle one year to under three years \$26, as against \$45; cattle three years and over \$39, against \$67. For all descriptions, the average value per head for Canada was for horses \$83, as against \$106 in 1920; for milch cows \$51, as against \$80; for other cattle \$28, as against \$47; for all cattle \$37, as against \$59; for sheep \$6, as against \$10; and for swine \$14, as against \$23. For swine per 100 lb. live weight the average was \$10, as against \$15 in 1920. The per capita values were the lowest of any during the last seven years 1915 to 1921, except that for swine the value in 1915 was \$14 as in 1921.

By application of the average values per head to the numbers of farm live stock as returned in June last, it is possible to calculate approximately the total values of farm live stock in Canada for the year 1921 with the corresponding values for 1920 in brackets as follows: horses, \$314,764,000 (\$361,328,000); milch cows, \$190,157,000 (\$281,675,000); other cattle, \$183,649,000 (\$279,825,000); all cattle, \$373,806,000 (\$561,500,000); sheep, \$23,308,000 (\$37,263,000); swine, \$54,842,000 (\$81,155,000). Thus, the estimated total value of these descriptions of farm live stock amounts to \$766,720,000, as compared with \$1,041,246,000 in 1920 and with \$749,640,000 in 1915. As compared with 1920, the decrease in value is \$274,526,000, or over 26 p.c.

**13.—Average Values of Farm Animals and of Wool, as estimated by Crop Correspondents, 1915-21.**

Provinces.	Horses.			Milch cows.	Other horned cattle.			Swine per 100 lb. live weight.	Sheep.	Wool per lb.		
	Under 1 year.	1 year to under 3 years.	3 years and over.		Under 1 year.	1 year to under 3 years.	3 years and over.			Un-washed.	Washed.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Canada.....	1915	54	111	160	62	17	38	55	9	8	0.28	0.38
	1916	54	109	160	70	20	43	63	12	10	0.37	0.50
	1917	57	116	167	84	24	52	77	17	15	0.59	0.75
	1918	56	112	162	87	25	57	88	16	16	0.62	0.80
	1919	55	108	161	92	25	56	83	16	15	0.55	0.70
	1920	49	102	151	80	20	45	67	15	10	0.22	0.32
	1921	38	79	123	51	12	26	39	10	6	0.14	0.22
P. E. Island.....	1915	42	92	136	42	11	25	37	8	7	0.32	0.40
	1916	37	76	112	52	14	31	46	12	9	0.37	0.47
	1917	41	79	118	63	17	37	54	17	14	0.60	0.76
	1918	43	86	131	71	17	38	60	16	15	0.65	0.83
	1919	53	97	146	83	20	48	72	16	14	0.46	0.59
	1920	45	93	141	60	14	31	47	13	8	0.19	0.26
	1921	35	74	112	38	9	20	30	9	5	0.13	0.19



### 13.—Average Values of Farm Animals and of Wool, as estimated by Crop Correspondents, 1915-21—concluded.

Provinces.	Horses.			Milch cows.	Other horned cattle.			Swine per 100 lb. live weight.	Sheep.	Wool per lb.	
	Under 1 year.	1 year to under 3 years.	3 years and over.		Under 1 year.	1 year to under 3 years.	3 years and over.			Un-washed.	Washed.
<b>Nova Scotia.....</b>											
1915	53	108	167	45	11	28	44	8	5	0.31	0.40
1916	50	99	150	53	13	33	54	11	7	0.39	0.49
1917	49	101	149	63	18	41	63	17	9	0.61	0.74
1918	51	100	152	65	15	40	62	17	10	0.71	0.83
1919	55	109	167	76	17	46	75	18	11	0.62	0.76
1920	51	107	157	71	16	40	66	16	8	0.21	0.29
1921	41	88	134	44	10	24	41	11	4	0.15	0.20
<b>New Brunswick...</b>											
1915	59	127	182	40	11	25	37	8	5	0.30	0.40
1916	55	113	169	48	13	28	44	12	6	0.36	0.48
1917	54	118	165	63	16	37	55	16	10	0.59	0.74
1918	60	125	175	65	18	38	58	17	12	0.71	0.89
1919	62	125	204	70	17	41	58	17	11	0.57	0.73
1920	58	120	176	61	15	35	53	15	8	0.21	0.32
1921	43	96	151	40	10	23	33	10	5	0.13	0.19
<b>Quebec.....</b>											
1915	48	104	159	51	12	28	42	10	7	0.33	0.43
1916	49	105	155	62	16	35	52	14	11	0.44	0.58
1917	53	117	171	81	19	43	67	20	15	0.65	0.83
1918	53	114	171	79	18	40	62	17	14	0.63	0.83
1919	55	120	179	84	19	42	64	17	13	0.57	0.76
1920	50	111	169	75	16	35	54	17	10	0.29	0.42
1921	36	85	136	46	9	21	33	11	6	0.21	0.31
<b>Ontario.....</b>											
1915	51	102	142	70	20	45	64	9	10	0.26	0.33
1916	52	105	151	76	23	51	71	12	13	0.34	0.44
1917	55	105	147	92	29	63	90	17	18	0.55	0.66
1918	54	105	146	96	29	65	94	17	20	0.61	0.76
1919	53	101	144	107	29	64	95	17	18	0.54	0.67
1920	52	100	143	92	25	55	82	16	12	0.18	0.25
1921	48	88	126	59	13	32	47	10	8	0.10	0.15
<b>Manitoba.....</b>											
1915	63	124	178	65	18	41	60	8	9	0.21	0.29
1916	61	123	171	74	21	47	67	11	12	0.31	0.37
1917	63	127	178	88	27	55	83	16	16	0.51	0.55
1918	65	126	182	91	28	65	93	16	17	0.56	0.67
1919	59	117	172	90	26	59	85	16	15	0.54	0.61
1920	50	104	154	71	18	43	65	14	9	0.17	0.23
1921	37	75	117	45	10	21	31	9	6	0.09	0.14
<b>Saskatchewan....</b>											
1915	64	132	150	69	20	44	62	8	8	0.20	0.24
1916	65	133	188	73	22	47	67	10	10	0.28	0.33
1917	69	137	194	85	27	58	83	15	14	0.50	0.54
1918	64	134	190	91	30	64	92	15	17	0.56	0.71
1919	56	108	162	91	27	60	86	16	15	0.51	0.62
1920	46	97	149	73	19	45	66	13	8	0.19	0.28
1921	31	71	118	49	11	27	40	9	6	0.12	0.15
<b>Alberta.....</b>											
1915	47	97	142	69	22	45	64	8	8	0.23	0.25
1916	51	102	151	77	27	51	73	11	10	0.28	0.37
1917	55	109	161	89	33	62	87	16	15	0.51	0.55
1918	48	96	142	93	32	64	95	15	15	0.57	0.69
1919	40	82	125	89	25	57	83	16	14	0.52	0.64
1920	32	72	114	71	20	45	64	14	10	0.18	0.22
1921	20	46	65	48	10	25	37	9	6	0.12	0.20
<b>British Columbia</b>											
1915	42	93	136	91	21	48	67	9	8	0.19	0.20
1916	48	87	144	90	24	48	72	13	11	0.29	0.45
1917	50	101	155	103	29	62	89	17	14	0.46	0.52
1918	52	98	150	106	29	65	93	15	15	0.54	0.64
1919	63	110	167	118	35	70	102	19	16	0.49	0.58
1920	50	103	162	125	30	68	95	19	11	0.17	0.32
1921	33	75	138	85	18	40	58	12	8	0.08	0.12

NOTE.—See paragraph relating to production and value of wool on page 274.

14.—Average value per head of Farm Live Stock in Canada, as estimated by Crop Correspondents, 1915-1921.

Farm Animals.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$	\$
<b>Canada—</b>							
Horses.....	125	129	126	127	119	106	89
Milch cows.....	62	70	86	87	92	80	51
Other cattle.....	45	54	57	61	58	47	28
Total cattle.....	52	61	69	70	70	59	37
Sheep.....	8	10	15	16	15	10	6
Swine.....	14	18	26	26	25	23	14
<b>Prince Edward Island—</b>							
Horses.....	106	87	88	103	114	109	84
Milch cows.....	42	52	64	71	83	60	38
Other cattle.....	28	35	38	44	53	34	21
Total cattle.....	34	42	50	54	64	43	28
Sheep.....	7	9	14	15	14	8	5
Swine.....	13	20	27	29	27	24	16
<b>Nova Scotia—</b>							
Horses.....	121	108	111	117	127	119	98
Milch cows.....	45	53	63	65	76	71	44
Other cattle.....	32	38	45	44	54	43	27
Total cattle.....	38	45	54	53	63	55	34
Sheep.....	6	7	9	10	11	8	4
Swine.....	18	18	29	30	29	24	18
<b>New Brunswick—</b>							
Horses.....	137	127	127	141	138	139	115
Milch cows.....	40	49	63	65	70	61	40
Other cattle.....	28	33	40	41	42	39	23
Total cattle.....	34	41	52	51	53	49	31
Sheep.....	5	7	10	12	11	8	5
Swine.....	18	17	27	28	31	22	17
<b>Quebec—</b>							
Horses.....	112	115	132	131	134	126	89
Milch cows.....	51	62	82	79	84	75	46
Other cattle.....	41	51	46	45	44	38	23
Total cattle.....	46	57	63	61	61	56	35
Sheep.....	8	11	15	14	13	10	6
Swine.....	15	17	29	26	24	26	16
<b>Ontario—</b>							
Horses.....	120	125	113	111	110	108	96
Milch cows.....	70	76	93	96	107	92	59
Other cattle.....	48	65	63	67	68	57	34
Total cattle.....	59	71	79	78	83	71	45
Sheep.....	10	13	19	20	18	12	8
Swine.....	14	18	25	27	25	23	13
<b>Manitoba—</b>							
Horses.....	133	128	138	141	131	114	89
Milch cows.....	65	74	88	91	90	71	45
Other cattle.....	44	51	57	64	58	44	23
Total cattle.....	52	59	69	73	67	52	30
Sheep.....	9	12	16	17	15	9	6
Swine.....	15	17	24	26	27	22	14
<b>Saskatchewan—</b>							
Horses.....	147	149	138	149	125	108	82
Milch cows.....	69	73	85	91	91	73	49
Other cattle.....	48	51	59	66	62	45	28
Total cattle.....	54	58	66	73	70	59	33
Sheep.....	8	10	14	17	15	8	6
Swine.....	13	17	25	28	26	20	14
<b>Alberta—</b>							
Horses.....	113	121	122	107	94	80	64
Milch cows.....	69	77	89	93	89	71	48
Other cattle.....	49	56	64	70	60	45	28
Total cattle.....	53	61	70	74	66	51	32
Sheep.....	8	10	15	15	14	10	6
Swine.....	13	17	24	24	25	18	13
<b>British Columbia—</b>							
Horses.....	102	108	118	123	129	126	100
Milch cows.....	91	94	103	106	118	126	85
Other cattle.....	50	55	65	67	71	72	40
Total cattle.....	61	66	73	75	81	99	50
Sheep.....	8	11	14	15	16	11	8
Swine.....	15	19	21	24	28	21	17

## 15.—Estimated Total Values of Farm Live Stock in Canada, by Provinces, 1916-1921.

Province and Year.		Horses.	Cattle.	Sheep.	Swine.	Total.
		\$	\$	\$	\$	\$
Canada	1916	418,686,000	403,373,000	20,927,000	60,700,000	903,686,000
	1917	429,123,000	544,676,000	35,576,000	92,886,000	1,102,261,000
	1918	459,155,000	704,058,000	48,802,000	112,751,000	1,326,766,000
	1919	435,070,000	708,821,000	50,402,000	102,309,000	1,296,602,000
	1920	361,328,000	561,500,000	37,263,000	81,155,000	1,041,246,000
	1921	314,764,000	373,806,000	23,308,000	54,842,000	766,720,000
P. E. Island	1916	3,355,000	4,369,000	799,000	766,000	9,289,000
	1917	3,408,000	4,993,000	1,245,000	947,000	10,598,000
	1918	3,353,000	5,930,000	1,081,000	1,183,000	11,547,000
	1919	3,935,000	8,024,000	1,603,000	1,320,000	14,882,000
	1920	3,830,000	5,991,000	1,073,000	1,205,000	12,149,000
	1921	2,637,000	3,861,000	654,000	688,000	7,840,000
Nova Scotia	1916	6,933,000	12,172,000	1,306,000	935,000	21,346,000
	1917	7,141,000	14,391,000	1,809,000	2,626,000	25,967,000
	1918	8,194,000	21,883,000	1,433,000	2,020,000	33,030,000
	1919	8,838,000	25,496,000	2,877,000	2,029,000	39,240,000
	1920	8,066,000	21,927,000	3,260,000	1,395,000	34,648,000
	1921	6,007,000	11,335,000	1,437,000	937,000	19,716,000
New Brunswick	1916	8,244,000	7,904,000	689,000	1,202,000	18,039,000
	1917	8,244,000	9,843,000	1,039,000	1,853,000	20,984,000
	1918	9,335,000	14,580,000	1,642,000	2,219,000	27,826,000
	1919	10,776,000	19,510,000	2,449,000	3,291,000	36,026,000
	1920	10,666,000	16,237,000	2,241,000	2,044,000	31,188,000
	1921	8,045,000	9,159,000	1,185,000	1,519,000	19,908,000
Quebec	1916	38,252,000	66,720,000	5,226,000	9,032,000	119,230,000
	1917	49,875,000	118,078,000	12,737,000	20,294,000	200,984,000
	1918	65,032,000	143,007,000	13,427,000	25,929,000	252,445,000
	1919	62,163,000	139,119,000	13,097,000	22,450,000	236,829,000
	1920	55,533,000	119,164,000	10,320,000	21,747,000	206,814,000
	1921	36,219,000	71,113,000	6,040,000	14,143,000	127,515,000
Ontario	1916	112,026,000	140,866,000	7,370,000	25,283,000	285,545,000
	1917	100,250,000	154,428,000	11,016,000	31,211,000	296,914,000
	1918	81,163,000	224,230,000	19,766,000	43,896,000	369,111,000
	1919	79,153,000	242,895,000	19,831,000	42,387,000	384,266,000
	1920	76,197,000	205,007,000	13,349,000	37,641,000	332,194,000
	1921	66,340,000	128,767,000	8,249,000	20,659,000	224,024,000
Manitoba	1916	41,494,000	32,678,000	883,000	3,500,000	78,555,000
	1917	44,574,000	38,330,000	1,239,000	4,157,000	88,350,000
	1918	54,371,000	54,163,000	2,317,000	7,517,000	118,373,000
	1919	49,523,000	52,634,000	2,518,000	7,185,000	111,910,000
	1920	40,536,000	39,344,000	1,389,000	4,601,000	85,870,000
	1921	37,305,000	24,508,000	733,000	3,039,000	65,635,000
Saskatchewan	1916	125,023,000	58,508,000	1,242,000	9,022,000	193,795,000
	1917	121,432,000	80,329,000	1,822,000	14,492,000	218,125,000
	1918	147,511,000	93,261,000	2,281,000	14,595,000	257,648,000
	1919	139,807,000	96,381,000	2,204,000	11,242,000	249,634,000
	1920	101,499,000	69,509,000	1,287,000	6,438,000	178,733,000
	1921	95,463,000	52,239,000	1,200,000	5,963,000	154,865,000
Alberta	1916	73,737,000	70,789,000	2,926,000	10,260,000	157,712,000
	1917	87,635,000	106,789,000	4,016,000	17,708,000	216,148,000
	1918	84,662,000	125,971,000	4,983,000	14,437,000	230,053,000
	1919	75,236,000	104,804,000	5,103,000	11,146,000	196,289,000
	1920	59,343,000	68,963,000	3,833,000	5,158,000	137,302,000
	1921	53,283,000	59,760,000	3,348,000	7,188,000	128,579,000
British Columbia	1916	6,622,000	9,367,000	486,000	700,000	17,174,000
	1917	6,503,000	17,485,000	603,000	791,000	25,384,000
	1918	5,424,000	18,478,000	679,000	955,000	25,540,000
	1919	5,639,000	19,908,000	720,000	1,259,000	27,526,000
	1920	5,553,000	15,358,000	511,000	926,000	22,348,000
	1921	4,456,000	13,064,000	412,000	706,000	18,638,000

## 16.—Estimated Values of Milch Cows and Other Cattle, 1916-1921.

Province.	Milch cows.	Other cattle.	Total cattle.
	\$	\$	\$
<b>Canada</b> .....			
1916	198,896,000	204,477,000	403,373,000
1917	274,081,000	270,595,000	544,676,000
1918	307,244,000	398,814,000	706,058,000
1919	327,814,000	381,007,000	708,821,000
1920	281,675,000	279,825,000	561,500,000
1921	190,157,000	183,649,000	373,806,000
<b>P. E. Island</b> .....			
1916	2,394,000	1,975,000	4,369,000
1917	2,923,000	2,075,000	4,998,000
1918	2,922,000	3,008,000	5,930,000
1919	3,794,000	4,230,000	8,024,000
1920	2,975,000	3,016,000	5,991,000
1921	2,079,000	1,782,000	3,861,000
<b>Nova Scotia</b> .....			
1916	6,897,000	5,275,000	12,172,000
1917	8,314,000	6,077,000	14,391,000
1918	10,337,000	11,046,000	21,383,000
1919	12,329,000	13,167,000	25,496,000
1920	12,033,000	9,894,000	21,927,000
1921	6,259,000	5,076,000	11,335,000
<b>New Brunswick</b> .....			
1916	4,861,000	3,043,000	7,904,000
1917	6,314,000	3,534,000	9,848,000
1918	7,810,000	6,770,000	14,580,000
1919	10,640,000	8,870,000	19,510,000
1920	9,013,000	7,224,000	16,237,000
1921	5,562,000	3,597,000	9,159,000
<b>Quebec</b> .....			
1916	39,668,000	27,052,000	66,720,000
1917	74,248,000	43,830,000	118,078,000
1918	91,945,000	56,062,000	148,007,000
1919	88,734,000	50,385,000	139,119,000
1920	77,311,000	41,853,000	119,164,000
1921	47,812,000	23,301,000	71,113,000
<b>Ontario</b> .....			
1916	82,241,000	58,625,000	140,866,000
1917	100,096,000	54,332,000	154,428,000
1918	105,515,000	118,765,000	224,280,000
1919	121,623,000	121,272,000	242,895,000
1920	107,128,000	97,879,000	205,007,000
1921	71,250,000	57,517,000	128,767,000
<b>Manitoba</b> .....			
1916	14,427,000	18,251,000	32,678,000
1917	17,842,000	20,488,000	38,330,000
1918	20,622,000	33,546,000	54,168,000
1919	20,603,000	32,075,000	52,678,000
1920	15,698,000	23,646,000	39,344,000
1921	11,378,000	13,130,000	24,508,000
<b>Saskatchewan</b> .....			
1916	23,358,000	35,150,000	58,508,000
1917	30,213,000	50,116,000	80,329,000
1918	32,122,000	61,139,000	93,261,000
1919	34,040,000	62,341,000	96,381,000
1920	25,879,000	43,630,000	69,509,000
1921	20,577,000	31,662,000	52,239,000
<b>Alberta</b> .....			
1916	21,354,000	49,435,000	70,789,000
1917	29,083,000	77,706,000	106,789,000
1918	30,569,000	95,402,000	125,971,000
1919	29,957,000	74,847,000	104,804,000
1920	21,698,000	47,265,000	68,963,000
1921	20,312,000	39,448,000	59,760,000
<b>British Columbia</b> .....			
1916	3,696,000	5,671,000	9,367,000
1917	5,048,000	12,437,000	17,485,000
1918	5,402,000	13,076,000	18,478,000
1919	6,088,000	13,820,000	19,908,000
1920	9,940,000	5,418,000	15,358,000
1921	4,928,000	8,136,000	13,064,000



**Farm Poultry.**—Table 17 gives the numbers and values of farm poultry in 1921, as compared with 1920, the values being estimated by application to the numbers of average values per head as reported by crop correspondents. For Canada, the average values per head of each description of farm poultry in 1921 were returned as follows: turkeys \$3.39, as compared with \$4 in 1920; geese \$2.42, against \$2.80; ducks \$1.25, against \$1.50; other fowls 90 cents, against \$1.08. Approximately the total values of farm poultry for all Canada in 1921 were as follows, the corresponding totals for 1920 being given within brackets: turkeys, \$4,069,300 (\$3,225,000); geese, \$2,126,200 (\$2,131,100); ducks, \$950,900 (\$976,900); other fowls, \$30,860,600 (\$30,683,000); Total, \$38,007,000 (\$37,016,000). The greater value in 1921 was due to increase in the numbers reported.

**17.—Estimated Numbers and Values of Farm Poultry in Canada, 1920-21.**

Description.	1920.	1921.	1920.	1921.	1920.	1921.
	No.	No.	\$ per head.	\$ per head.	\$	\$
<b>Canada—</b>						
Turkeys.....	806,166	1,199,494	4.00	3.39	3,225,000	4,069,300
Geese.....	761,655	880,014	2.80	2.42	2,131,100	2,126,200
Ducks.....	651,235	762,135	1.50	1.25	976,900	950,900
Other fowls.....	28,286,763	34,340,474	1.08	0.90	30,683,000	30,860,600
Totals.....	30,505,819	37,182,117	—	—	37,016,000	38,007,000
<b>P. E. Island—</b>						
Turkeys.....	6,482	4,153	3.72	4.33	24,000	18,000
Geese.....	22,654	27,069	2.85	2.75	64,600	74,400
Ducks.....	9,282	11,133	1.46	1.39	13,600	15,500
Other fowls.....	611,399	647,088	1.00	0.89	612,000	575,900
Totals.....	649,817	689,443	—	—	714,800	683,800
<b>Nova Scotia—</b>						
Turkeys.....	6,283	7,853	4.24	3.98	26,600	31,300
Geese.....	16,532	13,460	3.05	2.83	50,400	38,000
Ducks.....	10,543	10,678	1.50	1.50	15,800	16,000
Other fowls.....	805,328	708,753	1.00	0.91	805,300	645,000
Totals.....	838,686	740,744	—	—	898,100	730,300
<b>New Brunswick—</b>						
Turkeys.....	22,192	29,452	4.00	4.24	88,800	124,900
Geese.....	20,142	22,585	3.07	2.92	61,800	65,900
Ducks.....	8,913	11,826	1.59	1.50	14,200	17,700
Other fowls.....	701,987	679,542	1.15	1.05	807,300	713,500
Totals.....	753,234	743,405	—	—	972,100	922,000
<b>Quebec—</b>						
Turkeys.....	114,377	146,004	4.35	3.62	497,900	528,500
Geese.....	130,384	129,864	2.74	2.31	357,300	300,000
Ducks.....	115,697	80,618	1.59	1.38	184,000	111,300
Other fowls.....	3,177,402	3,476,729	1.23	1.12	3,908,200	3,893,900
Totals.....	3,537,860	3,833,215	—	—	4,947,400	4,833,700
<b>Ontario—</b>						
Turkeys.....	267,883	291,377	5.00	4.18	1,339,400	1,217,000
Geese.....	395,238	413,219	2.88	2.48	1,138,300	1,024,800
Ducks.....	311,652	363,758	1.58	1.31	492,900	476,500
Other fowls.....	10,030,872	10,389,852	1.19	1.05	11,936,700	10,909,300
Totals.....	11,005,645	11,458,206	—	—	14,907,300	13,627,600
<b>Manitoba—</b>						
Turkeys.....	145,000	172,830	3.31	3.25	480,000	561,700
Geese.....	64,500	69,171	2.55	2.20	164,500	152,200
Ducks.....	64,000	61,015	1.25	1.03	80,000	62,800
Other fowls.....	3,100,000	3,449,598	0.90	0.78	2,790,000	2,690,700
Totals.....	3,373,500	3,752,614	—	—	3,514,500	3,467,400

## 17.—Estimated Numbers and Values of Farm Poultry in Canada, 1920-21—concluded.

Description.	1920.	1921.	1920.	1921.	1920.	1921.
	No.	No.	\$ per head.	\$ per head.	\$	\$
<b>Saskatchewan—</b>						
Turkeys.....	221,691	255,923	3.00	2.85	665,100	729,400
Geese.....	92,743	109,365	2.50	2.29	231,900	250,400
Ducks.....	75,188	136,933	1.25	1.07	94,000	146,500
Other fowls.....	6,217,518	9,051,788	0.92	0.70	5,720,100	6,336,300
Totals.....	6,607,140	9,554,009	—	—	6,711,100	7,462,600
<b>Alberta—</b>						
Turkeys.....	14,400	283,346	3.07	2.90	44,200	821,700
Geese.....	7,200	83,363	2.55	2.22	18,400	185,000
Ducks.....	33,597	62,814	1.22	1.13	41,000	71,000
Other fowls.....	2,844,658	4,534,042	0.92	0.70	2,157,000	3,173,800
Totals.....	2,899,855	4,963,565	—	—	2,260,600	4,251,500
<b>British Columbia—</b>						
Turkeys.....	7,858	8,556	7.50	4.30	58,900	36,800
Geese.....	12,262	11,918	3.58	2.98	43,900	35,500
Ducks.....	22,363	23,360	1.85	1.44	41,400	33,600
Other fowls.....	1,297,599	1,403,082	1.50	1.37	1,946,400	1,922,200
Totals.....	1,340,082	1,446,916	—	—	2,090,600	2,028,100

**Fur Farming in Canada.**—According to reports issued by the Dominion Bureau of Statistics, the total number of fur farms in Canada was 794 in 1921, as compared with 587 in 1920, an increase of 207. The returns for these two years are more complete than those collected for the first time in 1919; so that comparisons are not attempted with the figures recorded at pages 227 and 228 of the Year Book for 1920. Table 18 gives, by provinces, the number of fur farms, the value of land and buildings, and the value of fur-bearing animals for the two years 1920 and 1921.

## 18.—Number of Fur Farms, Value of Land and Buildings and Value of Fur-bearing Animals, 1920 and 1921.

Province.	Fur Farms.		Value of Land and Buildings.		Value of Fur-bearing Animals.	
	1920.	1921.	1920.	1921.	1920.	1921.
	No.	No.	\$	\$	\$	\$
Prince Edward Island.....	309	359	640,489	737,085	3,089,970	3,248,120
Nova Scotia.....	55	108	67,875	127,724	209,150	371,801
New Brunswick.....	57	62	101,354	130,160	532,250	598,730
Quebec.....	80	109	121,498	173,204	256,935	430,607
Ontario.....	42	94	70,928	144,049	221,880	374,517
Manitoba.....	2	6	53,268	90,850	116,800	406,525
Saskatchewan.....	2	5	33,000	37,075	68,970	98,800
Alberta.....	15	14	59,700	61,875	139,670	105,460
British Columbia.....	11	21	13,029	21,100	28,105	63,735
Yukon Territory.....	14	16	41,450	37,378	59,175	76,800
Total.....	587	794	1,202,591	4,722,905	4,722,905	5,775,095

The value of land and buildings increased during the year by \$357,909, or 28 p.c., and the value of fur-bearing animals by \$1,052,190, or 22 p.c. Table 19 shows the number and value of each description of fur-bearing animal for the two years 1920 and 1921.

**19.—Number and Value of Fur-bearing Animals on Fur Farms in Canada, 1920 and 1921.**

Kind of Animal.	Number of Fur-bearing Animals.		Value of Fur-bearing Animals.	
	1920.	1921.	1920.	1921.
	No.	No.	\$	\$
Silver Fox.....	13,694	17,321	4,536,417	5,588,315
Patch Fox.....	1,103	1,220	87,735	101,550
Red Fox.....	373	484	11,810	10,035
Blue Fox.....	3	—	748	—
White Fox.....	1	—	100	—
Mink.....	188	210	4,835	5,366
Marten.....	3	8	100	410
Fisher.....	6	5	675	700
Raccoon.....	23	55	260	854
Skunk.....	33	99	125	500
Opossum.....	—	9	—	65
Lynx.....	2	2	100	200
Bear.....	—	2	—	200
Brown Beaver.....	—	39	—	1,300
White Beaver.....	—	1	—	50
Muskrat.....	—	2,250	—	5,550
Karakul Sheep.....	1,100	750	80,000	60,000
Total.....	16,529	22,455	4,722,905	5,775,095

The table shows that the industry is expanding not only as regards increase in the number of foxes, which are the principal fur-producing animals domesticated, but also by the addition of other fur-bearing animals. Mink, raccoon, and skunk have increased in numbers and in 1921 there appear for the first time opossum, bears, beavers and muskrats. The total number of fur-bearing animals on the farms at the end of 1921 was 22,455, with a value of \$5,775,095, as compared with 16,529 animals valued at \$4,722,905 in 1920. The total for 1921 comprises 17,321 silver foxes valued at \$5,588,315; 1,220 patch foxes valued at \$101,550; 484 red foxes valued at \$10,035; 210 mink, value \$5,366; 750 karakul sheep, value \$60,000; 2,250 muskrat, value \$5,550, and 220 miscellaneous, value \$4,279. The number of fur-bearing animals sold from fur farms during 1921 was 3,175, value \$806,139. Of these, 2,668 were silver foxes, value \$779,110. The pelts sold numbered 4,854, valued at \$609,097; they included the pelts of 3,790 silver foxes, value \$579,456, of 402 patch foxes, value \$22,608, of 336 red foxes, value \$4,261, of 91 mink, value \$962 and of 235 miscellaneous, value \$1,810. The total amount received by fur farmers in 1921 from the sale of live fur-bearing animals and pelts was \$1,415,236, as compared with \$1,151,556 in 1920, an increase of \$263,680, or 23 p.c.

#### DAIRYING.

**Production and Value of Creamery Butter.**—The total quantity of creamery butter produced in Canada in 1921 (Table 20), was 122,776,580 lb., of the value of \$45,893,088, as compared with 111,691,718 lb., of the value of \$63,625,203 in 1920, an increase in quantity of 11,084,862 lb., or 10 p.c., and a decrease in value of \$17,732,111, or 28 p.c. The decrease in value was caused by a lower average price per lb., which dropped from 56 cents in 1920 to 37 cents

in 1921. Increased production of creamery butter is shown by all the provinces, excepting Prince Edward Island, the largest proportionate increase being in British Columbia, where the production increased during the year by 36 p.c. In Ontario the production increased by 16 p.c.

**Production and Value of Factory Cheese.**—The total production of factory cheese in 1921 (Table 21) was 161,062,626 lb., of the value of \$28,615,185, as compared with 149,201,856 lb., of the value of \$39,100,872 in 1920, an increase in quantity of 11,860,770 lb., or 8 p.c., and a decrease in value of \$10,485,687, or 27 p.c. The average wholesale price of cheese for Canada fell from 26 cents per lb. in 1920 to 17 cents in 1921. The provinces showing increased production were Alberta 123 p.c., Manitoba 120 p.c., British Columbia 23 p.c., Ontario 11 p.c., and Quebec 2 p.c.

**Condensed Milk and Milk Powder.**—The quantity of condensed milk made in Canada in 1921 was 39,101,243 lb., valued at \$5,844,333, a decrease in quantity of 14,561,456 lb., or 37 p.c., as compared with 1920. The quantity of evaporated milk made was 31,202,713 lb., valued at \$3,428,456, an increase in quantity over 1920. The quantity of milk powder and skim milk powder made in 1921 was 7,112,609 lb., valued at \$1,303,048. Of the 27 condenseries in operation in Canada in 1921, 22 were situated in Ontario, and to the total value of products of condenseries of \$14,162,762, Ontario contributed \$12,241,579. Table 22 shows the quantity and value of products other than butter and cheese for the years 1919, 1920 and 1921.

**Retrospective Statistics.**—In Table 23 the production and value of creamery butter and factory cheese is compared by provinces and for all Canada for the years 1900, 1907 and 1910, and annually from 1915 to 1921. Table 24 shows the total value of all the products of dairy factories by provinces for the five years 1917 to 1921.

20.—Production and Value of Creamery Butter, by Provinces, 1919-21.

Province.	1919.	1920.	1921.	1919.	1920.	1921.
	lb.	lb.	lb.	\$	\$	\$
Prince Edward Island.....	905,752	1,166,032	1,109,546	485,880	674,744	452,523
Nova Scotia.....	2,107,429	2,503,188	3,074,768	1,186,322	1,518,757	1,306,465
New Brunswick.....	910,504	1,053,649	1,152,168	503,714	606,891	475,112
Quebec.....	37,681,366	41,632,511	42,575,392	20,857,523	23,580,949	15,431,962
Ontario.....	33,903,562	37,234,998	43,525,742	18,340,951	21,343,858	16,665,277
Manitoba.....	8,268,342	7,578,549	8,541,095	4,350,693	4,282,731	3,253,057
Saskatchewan.....	6,622,572	6,638,656	7,030,053	3,495,172	3,727,140	2,552,698
Alberta.....	11,822,890	11,821,291	12,929,264	6,132,733	6,555,509	4,478,585
British Columbia.....	1,668,290	2,062,844	2,818,552	1,018,997	1,334,624	1,277,409
<b>Total.....</b>	<b>103,890,707</b>	<b>111,691,718</b>	<b>122,776,580</b>	<b>56,371,985</b>	<b>63,625,203</b>	<b>45,893,088</b>



## 21.—Production and Value of Factory Cheese, by Provinces, 1919-21.

Province.	1919.	1920.	1921.	1919.	1920.	1921.
	lb.	lb.	lb.	\$	\$	\$
Prince Edward Island.....	2,472,563	2,081,277	1,681,779	640,569	525,635	293,651
Nova Scotia.....	47,360	52,638	29,440	12,952	14,865	5,578
New Brunswick.....	1,252,849	1,235,008	1,100,382	349,794	336,409	203,941
Quebec.....	58,044,719	52,162,777	53,525,706	15,305,488	13,372,250	9,188,983
Ontario.....	103,320,041	92,784,757	103,135,613	27,920,477	24,605,823	18,604,766
Manitoba.....	423,855	116,229	255,829	111,898	31,611	47,341
Saskatchewan.....	35,452	28,367	22,659	11,527	7,790	4,209
Alberta.....	520,530	398,750	889,904	145,158	110,355	186,175
British Columbia.....	304,502	342,053	421,314	88,305	96,134	80,541
<b>Total.....</b>	<b>166,421,871</b>	<b>149,201,856</b>	<b>161,062,626</b>	<b>44,586,168</b>	<b>39,100,872</b>	<b>28,615,185</b>

## 22.—Miscellaneous Products of Dairy Factories, 1919, 1920 and 1921.

Product.	1919.		1920.		1921.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
Condensed milk.....lb.	62,216,383	9,456,016	53,662,699	10,202,230	39,101,243	5,844,333
Evaporated milk.....lb.	16,107,934	1,789,089	30,469,642	3,809,653	31,202,713	3,428,456
Milk powder.....lb.	6,788,770	1,617,046	7,574,668	2,178,176	1,493,909	492,042
Skim milk powder.....lb.	-	-	-	-	5,618,700	811,006
Sterilized milk.....lb.	7,460,400	852,080	7,608,927	785,044	6,696,264	719,009
Skim condensed milk.....lb.	494,973	32,921	363,294	18,723	1,096,006	39,082
Condensed coffee and cocoa.....lb.	743,984	150,668	531,451	147,052	324,011	94,065
Whey butter.....lb.	1,404,491	661,014	1,516,932	757,156	1,097,397	348,369
Casein.....lb.	199,703	32,693	109,958	19,233	98,136	9,814
Ice cream.....gal.	2,854,070	3,634,686	2,996,514	4,151,949	3,259,551	4,072,531
Milk sold.....gal.	23,017,800	10,662,526	28,199,796	14,249,858	27,660,810	13,153,450
Cream sold... (lb. butter fat)	6,505,394	4,826,226	7,379,131	6,533,098	8,743,234	6,110,689
Buttermilk sold.....	-	256,491	-	306,235	-	298,889
Whey cream.....lb.	-	-	-	-	833,658	231,731
Sundry.....	-	266,993	-	452,009	-	46,115
<b>Total.....</b>	<b>-</b>	<b>34,238,449</b>	<b>-</b>	<b>43,610,416</b>	<b>-</b>	<b>35,699,581</b>

## 23.—Production and Value of Creamery Butter and Factory Cheese in Canada, by Provinces, 1900, 1907, 1910 and 1915-1921.

## CANADA.

Year.	Estab-lish-ments.	Creamery Butter.		Factory Cheese.	
	No.	lb.	\$	lb.	\$
1900.....	3,576	36,066,739	7,240,972	220,833,269	22,221,430
1907.....	3,515	45,930,294	10,949,062	204,788,583	23,597,639
1910.....	3,625	64,489,398	15,597,807	199,904,205	21,587,124
1915.....	3,613	83,991,453	24,385,052	183,887,837	27,097,176
1916.....	3,446	82,564,130	26,966,355	192,968,597	35,512,622
1917.....	3,418	87,526,939	34,274,218	194,904,336	41,180,623
1918.....	3,373	93,298,348	41,859,156	174,878,313	39,456,532
1919.....	3,343	103,890,707	56,371,985	166,421,871	44,586,168
1920.....	3,165	111,691,718	63,625,203	149,201,856	39,100,872
1921.....	3,121	122,776,580	45,893,088	161,062,626	28,615,185

### 23.—Production and Value of Creamery Butter and Factory Cheese in Canada, by Provinces, 1900, 1907, 1910 and 1915-1921—continued.

#### PRINCE EDWARD ISLAND.

Year.	Estab-lish-ments.	Creamery Butter.		Factory Cheese.	
		No.	lb.	\$	lb.
1900.....	47	562,220	118,402	4,457,519	449,400
1907.....	43	358,422	89,339	2,250,316	251,410
1910.....	45	670,908	156,478	3,293,755	354,378
1915.....	42	539,516	151,065	2,260,000	327,700
1916.....	42	613,880	184,164	2,121,736	409,495
1917.....	40	597,271	239,940	2,234,985	466,317
1918.....	37	586,817	266,104	2,201,368	503,283
1919.....	38	905,752	485,880	2,472,563	640,569
1920.....	37	1,166,032	674,744	2,081,277	525,635
1921.....	34	1,109,546	452,523	1,681,779	293,651

#### NOVA SCOTIA.

1900.....	33	334,211	68,686	568,147	58,321	
1907.....	13	193,238	49,047	181,956	22,066	
1910.....	18	354,785	88,481	264,243	29,977	
1915.....	27	1,240,483	346,011	125,580	18,837	
1916.....	26	1,586,679	505,000	94,727	17,051	
1917.....	27	1,746,662	711,652	67,497	14,269	
1918.....	26	1,756,905	808,755	61,195	13,897	
1919.....	25	2,107,429	1,186,322	47,360	12,952	
1920.....	26	2,503,188	1,518,757	52,638	14,865	
1921.....	26	3,094,768	1,306,465	29,440	5,578	

#### NEW BRUNSWICK.

1900.....	68	287,814	58,589	1,892,686	187,106	
1907.....	53	969,167	231,102	1,205,773	146,720	
1910.....	42	849,633	212,205	1,166,243	129,677	
1915.....	43	776,416	231,838	1,165,651	168,086	
1916.....	43	709,932	236,193	1,185,664	210,693	
1917.....	41	565,699	233,686	1,244,106	257,645	
1918.....	42	660,010	302,818	1,185,225	267,577	
1919.....	41	910,504	503,714	1,252,849	349,794	
1920.....	38	1,053,649	606,891	1,235,008	336,409	
1921.....	38	1,152,168	475,112	1,100,382	203,941	

#### QUEBEC.

1900.....	1,992	24,625,000	4,916,756	80,630,199	7,957,621	
1907.....	2,074	31,056,154	7,256,629	69,887,625	7,888,109	
1910.....	2,143	41,782,678	9,961,732	58,171,091	6,195,254	
1915.....	2,058	36,621,491	10,899,810	54,217,113	7,571,691	
1916.....	1,984	34,323,275	11,516,148	61,906,750	11,245,104	
1917.....	1,976	34,392,562	13,689,310	67,835,017	14,172,273	
1918.....	1,954	36,761,057	16,364,950	62,070,162	13,976,866	
1919.....	1,868	37,681,366	20,857,523	58,044,719	15,305,488	
1920.....	1,809	41,632,511	23,580,949	52,162,777	13,372,250	
1921.....	1,774	42,575,392	15,431,962	53,525,706	9,188,983	

#### ONTARIO.

1900.....	1,336	7,559,542	1,527,935	131,967,612	13,440,987	
1907.....	1,209	8,862,618	2,120,457	129,693,010	15,106,030	
1910.....	1,254	13,876,888	3,331,025	136,093,951	14,769,566	
1915.....	1,164	26,414,120	7,534,653	125,001,136	18,831,413	
1916.....	1,165	24,680,109	8,031,997	126,015,870	23,312,935	
1917.....	1,135	28,714,352	11,219,029	121,173,086	25,771,944	
1918.....	1,126	29,452,422	13,163,938	107,886,724	24,256,019	
1919.....	1,121	33,903,562	18,340,951	103,320,041	27,920,477	
1920.....	1,058	37,234,998	21,343,858	92,784,757	24,605,823	
1921.....	1,059	43,525,742	16,665,277	103,135,613	18,604,766	

### 23.—Production and Value of Creamery Butter and Factory Cheese in Canada, by Provinces, 1900, 1907, 1910 and 1915-1921—concluded.

#### MANITOBA.

Year.	Estab- lish- ments.  No.	Creamery Butter.		Factory Cheese.	
		lb.	\$	lb.	\$
1900.....	69	1,557,010	292,247	1,289,413	124,025
1907.....	51	1,561,398	388,427	1,266,592	144,836
1910.....	42	2,050,487	511,972	694,713	81,403
1915.....	59	5,839,667	1,693,503	726,725	109,008
1916.....	58	6,574,510	2,038,109	880,728	158,931
1917.....	64	7,050,921	2,595,472	1,003,646	199,036
1918.....	59	8,436,962	3,897,476	657,585	143,821
1919.....	56	8,268,342	4,350,693	423,855	111,898
1920.....	57	7,578,549	4,282,731	116,229	31,611
1921.....	51	8,541,095	3,253,057	255,829	47,341

#### SASKATCHEWAN.

1900.....	5	143,645	29,362	6,000	868
1907.....	7	132,803	36,599	15,000	1,950
1910.....	27	1,548,696	381,809	26,730	3,396
1915.....	29	3,811,014	1,055,000	-	-
1916.....	32	4,310,669	1,338,180	-	-
1917.....	31	4,220,758	1,575,965	-	-
1918.....	39	5,009,014	2,221,403	13,573	3,257
1919.....	43	6,622,572	3,495,172	35,452	11,527
1920.....	47	6,638,656	3,727,140	28,367	7,790
1921.....	56	7,030,053	2,552,698	22,659	4,209

#### ALBERTA.

1900.....	18	601,489	123,305	21,693	3,102
1907.....	53	1,507,697	362,782	197,911	24,468
1910.....	56	2,149,121	533,422	193,479	23,473
1915.....	62	7,544,148	2,021,448	381,632	68,441
1916.....	64	8,521,784	2,619,248	745,122	154,453
1917.....	73	8,943,971	3,414,541	1,274,905	280,185
1918.....	61	9,053,237	4,025,851	552,834	130,911
1919.....	58	11,822,890	6,132,733	520,530	145,158
1920.....	55	11,821,291	6,555,509	398,750	110,355
1921.....	49	12,929,264	4,478,585	889,904	186,175

#### BRITISH COLUMBIA.

1900.....	8	395,808	105,690	-	-
1907.....	13	1,283,797	414,680	90,400	12,050
1910.....	9	1,206,202	420,683	-	-
1915.....	29	1,204,598	451,724	10,000	2,000
1916.....	32	1,243,292	497,316	18,000	3,960
1917.....	31	1,294,743	594,623	71,094	18,954
1918.....	29	1,581,924	807,861	249,647	60,901
1919.....	32	1,668,290	1,018,997	304,502	88,305
1920.....	34	2,062,844	1,334,624	342,053	96,134
1921.....	34	2,818,552	1,227,409	421,314	80,541

### 24.—Total Value of All Products of Dairy Factories, by Provinces, 1917-21.

Province.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Canada.....	93,879,326	107,340,850	135,196,602	146,336,491	110,207,854
P.E. Island.....	762,334	855,374	1,184,163	1,252,013	792,296
Nova Scotia.....	1,171,376	1,423,451	1,974,269	2,517,338	2,002,409
New Brunswick.....	589,235	768,034	1,167,256	1,196,354	897,288
Quebec.....	28,358,876	31,033,944	36,790,037	37,732,572	25,174,136
Ontario.....	48,720,706	54,785,716	69,897,519	75,926,248	59,865,759
Manitoba.....	1,424,190	6,119,219	7,042,646	7,788,178	6,066,015
Saskatchewan.....	2,375,399	3,261,222	5,042,377	5,536,245	4,197,808
Alberta.....	5,247,343	5,550,583	7,872,541	8,838,298	6,439,095
British Columbia.....	2,529,867	3,543,307	4,225,794	5,549,245	4,773,048

FRUIT PRODUCTION IN CANADA, 1920.<sup>1</sup>

**Commercial Production and Value of Apples.**—Statistics, collected jointly by the Dominion Bureau of Statistics and the Fruit Branch of the Dominion Department of Agriculture, showed that the commercial production of apples in Canada for the year 1920 was 3,404,340 barrels of the value of \$29,849,149, as compared with 3,334,660 barrels, of the value of \$24,396,210 in 1919, representing for 1920 an increase of 69,680 barrels in production and of \$5,452,939 in value. By provinces, the production and value were as follows: Nova Scotia 1,160,000 barrels, value \$10,931,420, in 1920, as compared with 1,600,000 barrels, value \$9,989,680, in 1919; New Brunswick 30,000 barrels, value \$167,371, in 1920, 40,000 barrels, value \$307,400, in 1919; Quebec 88,000 barrels, value \$569,688, in 1920, 70,500 barrels, value \$527,950, in 1919; Ontario 1,621,800 barrels, value \$13,073,765, in 1920, 878,860 barrels, value \$7,030,880, in 1919; British Columbia 504,540 barrels, value \$5,106,905, in 1920, 745,300 barrels, value \$6,540,300, in 1919. The average value per barrel for Canada was \$8.77 in 1920, as compared with \$7.31 in 1919. By provinces, the average values were: Nova Scotia \$9.42 in 1920, as against \$6.24 in 1919; New Brunswick \$5.78, against \$7.68; Quebec \$6.47, against \$7.50; Ontario \$8.06, against \$8; British Columbia \$10.12, against \$8.78.

These figures are set out in Table 25, and in Table 26 the estimated distribution of commercial apples into early, fall and winter varieties is given for all the provinces for the year 1920. Table 27 shows the apple production in Ontario by the 15 fruit inspection districts of the Fruit Branch of the Department of Agriculture for the year 1920, as compared with 1919.

25.—Production and Value of Commercial Apples in Canada, 1919 and 1920.

Province.	1919.			1920.		
	Quantity.	Total Value.	Value per Barrel.	Quantity.	Total Value.	Value per Barrel.
	barrels.	\$	\$	barrels.	\$	\$
Nova Scotia.....	1,600,000	9,989,680	6.24	1,160,000	10,931,420	9.42
New Brunswick.....	40,000	307,400	7.68	30,000	167,371	5.78
Quebec.....	70,500	527,950	7.50	88,000	569,688	6.47
Ontario.....	878,860	7,030,880	8.00	1,621,800	13,073,765	8.06
British Columbia.....	745,300	6,540,300	8.78	504,540	5,106,905	10.12
<b>Total.....</b>	<b>3,334,660</b>	<b>24,396,210</b>	<b>7.31</b>	<b>3,404,340</b>	<b>29,849,149</b>	<b>8.77</b>

NOTE.—Included in the above table are total export sales amounting to 1,127,400 barrels of the value, at par rate of exchange, of \$12,470,444, an average price per barrel of \$11.06. The province of Nova Scotia exported almost two-thirds of its total crop of 1920 at an average wholesale price of \$10.60 per barrel. The average wholesale price on the domestic market was \$6.25 per barrel. For the province of British Columbia boxes are expressed as barrels at the rate of three boxes to the barrel.

<sup>1</sup>Abridged from the complete Report in the Monthly Bulletin of Agricultural Statistics, August, 1921, (Vol. 14, No. 156, p. 329). and also published separately.



**26.—Estimated Distribution of Commercial Apples, by Early, Fall and Winter Varieties, 1920.**

Province.	Early.	Fall.	Winter.	Total.
	barrels.	barrels.	barrels.	barrels.
Nova Scotia.....	58,000	232,00	870,000	1,160,000
New Brunswick.....	6,000	19,500	4,500	30,000
Quebec.....	44,000	22,000	22,000	88,000
Ontario.....	75,915	208,626	1,337,342	1,621,800
British Columbia.....	75,681	126,135	302,724	504,540
<b>Totals.....</b>	<b>259,596</b>	<b>608,261</b>	<b>2,536,566</b>	<b>3,404,340</b>

**27.—Production of Apples in Ontario by Fruit Inspection Districts, 1919 and 1920.**

No.	Inspection District.	Early Apples.	Fall Apples.	Winter Apples.	Total Apples.
		barrels.	barrels.	barrels.	barrels.
1	Ottawa and St. Lawrence Valley.....	1919 2,297	5,148	4,775	12,220
		1920 <sup>1</sup> 2,000	5,000	3,000	10,000
2	Picton, South Bay and Lakes district.....	1919 207	2,389	39,204	41,801
		1920 2,297	4,644	42,242	49,183
3	Wellington, Rednerville.....	1919 78	7,115	12,248	19,441
		1920 88	5,957	26,068	32,113
4	Trenton.....	1919 —	2,088	29,004	31,092
		1920 30	4,747	26,330	31,107
5	Brighton.....	1919 341	1,441	21,781	23,563
		1920 75	3,972	61,759	65,806
6	Cobourg, Colborne and Port Hope.....	1919 581	3,994	37,876	42,451
		1920 49	2,976	38,574	41,599
7	Bowmanville, Newcastle and Oshawa.....	1919 159	1,195	25,663	27,017
		1920 —	1,907	46,553	48,460
8	Clarkson, Oakville, etc.....	1919 7,880	12,240	61,233	81,853
		1920 10,525	24,165	162,220	196,910
9	St. Catharines.....	1919 235	109	11,236	11,580
		1920 3,928	3,286	43,900	51,114
10	Fruitland—Beamsville.....	1919 2,741	732	24,777	28,250
		1920 8,822	11,828	210,720	231,370
11	Simcoe-Thamesville.....	1919 738	320	126,617	127,675
		1920 3,371	11,816	177,046	192,233
12	Middlesex.....	1919 54	124	19,841	20,019
		1920 813	6,700	109,456	116,969
13	Essex and Lambton.....	1919 1,455	14,398	57,555	73,408
		1920 4,400	10,704	88,571	103,675
14	Lake Huron.....	1919 5,210	60,512	188,532	254,254
		1920 29,557	79,608	183,483	292,648
15	Georgian Bay.....	1919 2,456	12,396	69,884	84,736
		1920 9,960	31,316	117,420	158,696
	<b>Totals.....</b>	<b>1919 24,432</b>	<b>124,201</b>	<b>730,227</b>	<b>878,860</b>
		<b>1920 75,915</b>	<b>208,626</b>	<b>1,337,342</b>	<b>1,621,883</b>

<sup>1</sup>Estimated.

**Nursery Trees, Bushes and Plants.**—During the year ended September 30, 1920, the total value of all nursery fruit stock sold in Canada amounted to \$500,167.52, as compared with \$270,817.75 in 1919. Of apple trees 453,609 were sold to the value of \$206,286.48, as compared with 306,419 of the value of \$85,560.76 in 1919. For 1920 the apples were divided into early apples 66,088, value \$31,313.28; fall apples 65,597, value \$29,529.85; winter apples 308,860, value \$139,487.45 and crab apples 13,064, value \$5,955.90. The number and value of other descriptions in 1920 were as follows: Pears 64,383, value \$37,870.70; plums 79,451, value \$51,599.49; peaches 38,763,

value \$18,135.13; cherries 53,521, value \$36,345.66; apricots 9,691, value \$6,403.20; quinces 382, value \$152.80; blackberries 1,735, value \$158.15; currants 223,040, value \$37,465.81; grapes 71,906, value \$12,207.83; gooseberries 87,664, value \$18,657.43; raspberries 589,999, value \$32,157.31; mulberries 32, value \$27.45; loganberries 28,057, value \$6,111.40; strawberries 2,788,333, value \$36,588.68. The average wholesale price per tree, bush or plant works out as follows: apples 45 cents against 28 cents in 1919; pears 59 cents against 35 cents; plums 65 cents against 33 cents; peaches 46 cents against 17 cents; cherries 68 cents against 34 cents; apricots 66 cents; quinces 40 cents; blackberries 11 cents against 4 cents; currants 17 cents against 16 cents; grapes 17 cents against 10 cents; gooseberries 21 cents against 23 cents; raspberries 5 cents against 6 cents; mulberries 85 cents; loganberries 22 cents against 10 cents; strawberries \$1.29 per 100 against \$1.43 per 100.

In Table 28 is given for Canada, and for each of the provinces, a summary of the number and value of each description of fruit stock sold during 1920, as compared with 1919.

**28.—Total Quantities and Values of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by Provinces, during the years ended September 30, 1919 and 1920.**

Description of Tree, Bush and Plant.	Varieties.		Sold.		Average price per Unit.		Total Value.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
<b>Canada—</b>	No.	No.	No.	No.	\$	\$	\$	\$
Apples—Early.....	21	13	42,327	66,088	·28	·47	11,741·28	31,313·28
Fall.....	19	14	53,865	65,597	·27	·45	14,370·99	29,529·85
Winter.....	53	41	210,227	308,860	·27	·45	59,448·49	139,487·45
Crab Apples.....	—	8	—	13,064	—	·46	—	5,955·90
Total Apples.....	93	76	306,419	453,609	·28	·45	85,560·76	206,286·48
Pears.....	11	14	63,149	64,383	·35	·59	22,056·28	37,870·70
Plums.....	34	44	75,284	79,451	·33	·65	24,980·40	51,599·49
Peaches.....	10	14	68,453	38,763	·17	·46	11,841·82	18,135·13
Cherries.....	26	22	70,557	53,521	·34	·68	24,239·78	36,345·66
Apricots.....	—	4	—	9,691	—	·66	—	6,403·20
Quinces.....	—	1	—	382	—	·40	—	152·80
<b>SMALL FRUITS—</b>								
Blackberries.....	1	4	14,000	1,735	·04	·11	490·00	158·15
Currants.....	15	19	180,040	223,040	·16	·17	28,057·08	37,465·81
Grapes.....	13	16	82,345	71,906	·10	·17	8,014·22	12,207·83
Gooseberries.....	10	8	62,440	87,664	·23	·21	14,328·00	18,657·43
Raspberries.....	17	22	495,331	589,999	·06	·05	27,785·60	32,157·31
Mulberries.....	—	1	—	32	—	·85	—	27·45
Loganberries.....	1	1	330	28,057	·10	·22	33·00	6,111·40
Strawberries.....	28	34	1,638,538	2,788,333	per 100. 1·43	per 100. 1·29	23,430·81	36,588·68
Total Value.....	—	—	—	—	—	—	270,817·75	500,167·52
<b>Nova Scotia—</b>								
Apples—Early.....	12	6	1,850	3,817	·35	·46	653·80	1,746·38
Fall.....	8	5	825	3,356	·48	·49	396·45	1,631·75
Winter.....	28	18	7,019	11,123	·30	·43	2,124·29	4,836·75
Total Apples.....	48	29	9,694	18,296	·33	·45	3,174·54	8,214·88
Pears.....	6	7	253	489	·71	·91	178·95	446·75
Plums.....	15	12	921	1,542	·70	·92	642·95	1,411·35
Peaches.....	1	—	35	—	·29	—	10·25	—
Cherries.....	10	6	474	129	·72	1·09	342·10	138·75

**28.—Total Quantities and Values of Fruit Trees, Bushes and Plants sold by  
Nurserymen in Canada, by Provinces, during the years ended  
September 30, 1919 and 1920—continued.**

Description of Tree, Bush and Plant.	Varieties.		Sold.		Average per price Unit.		Total Value.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
<b>Nova Scotia—con.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>SMALL FRUITS—</b>								
Blackberries.....	—	—	—	150	—	.01	—	1.50
Currants.....	7	6	1,556	2,236	.17	.20	264.25	453.30
Grapes.....	4	—	14	—	.50	—	7.00	—
Gooseberries.....	3	3	458	1,719	.21	.29	100.00	499.35
Raspberries.....	7	4	9,052	18,936	.04	.03	339.70	592.69
Strawberries.....	4	9	855,525	1,299,475	per 100. .45	per 100. .58	3,825.62	7,585.95
Total Value.....	—	—	—	—	—	—	8,885.36	19,344.52
<b>New Brunswick—</b>								
Apples—Early.....	—	4	—	2,957	—	.26	—	756.40
Fall.....	—	4	—	5,925	—	.27	—	1,590.00
Winter.....	—	13	—	10,414	—	.24	—	2,542.80
Crab Apples.....	—	3	—	325	—	.22	—	71.50
Total Apples.....	—	24	—	19,621	—	.25	—	4,960.70
Pears.....	—	2	—	200	—	.60	—	120.00
Plums.....	—	6	—	424	—	.59	—	248.40
Cherries.....	—	2	—	200	—	.60	—	120.00
Total Value.....	—	—	—	—	—	—	—	5,449.10
<b>Quebec—</b>								
Apples—Early.....	6	6	6,739	5,515	.32	.47	2,129.90	2,567.05
Fall.....	8	9	3,506	4,083	.31	.51	1,055.35	2,077.05
Winter.....	17	22	8,038	7,512	.28	.49	2,293.05	3,663.35
Crab Apples.....	—	5	—	150	—	.58	—	87.50
Total Apples.....	31	42	18,283	17,260	.30	.49	5,478.30	8,394.95
Pears.....	3	3	584	147	.25	.79	144.00	116.81
Plums.....	10	9	1,586	474	.44	.83	693.00	391.59
Cherries.....	4	4	362	330	.49	.82	176.00	270.56
<b>SMALL FRUITS—</b>								
Currants.....	6	7	665	1,010	.18	.27	116.50	275.84
Grapes.....	4	5	103	305	.35	.44	35.75	135.00
Gooseberries.....	4	4	800	582	.23	.35	220.70	202.75
Raspberries.....	7	5	6,925	3,334	.03	.10	216.88	328.90
Strawberries.....	4	5	7,100	16,052	per 100 1.53	per 100. 1.65	219.00	265.52
Total Value.....	—	—	—	—	—	—	7,300.13	10,381.92
<b>Ontario—</b>								
Apples—Early.....	11	6	21,659	42,872	.20	.46	4,368.46	19,695.75
Fall.....	9	10	28,880	32,927	.21	.43	6,187.39	14,307.80
Winter.....	40	28	105,632	155,795	.22	.46	23,762.20	70,887.00
Crab Apples.....	—	5	—	2,832	—	.36	—	1,012.50
Total Value.....	60	49	156,171	234,426	.22	.45	34,318.05	105,903.05
Pears.....	11	10	39,850	36,824	.30	.49	11,833.58	18,016.74
Plums.....	16	21	60,005	52,536	.26	.66	15,701.30	34,499.05
Peaches.....	8	13	89,745	30,399	.09	.42	8,275.67	12,769.08
Cherries.....	11	16	58,024	39,328	.30	.65	17,170.53	25,508.35
Quinces.....	—	—	—	382	—	.40	—	152.80
<b>SMALL FRUITS—</b>								
Blackberries.....	1	1	14,000	1,000	.04	.08	490.00	75.00
Currants.....	9	11	135,806	151,495	.08	.12	10,872.02	18,754.68
Grapes.....	10	12	76,921	66,069	.07	.16	5,720.47	10,761.51
Gooseberries.....	4	5	37,235	27,858	.12	.17	4,408.70	4,775.20
Raspberries.....	12	14	393,900	401,229	.04	.03	14,625.67	13,301.04
Mulberries.....	—	1	—	25	—	1.00	—	25.00
Strawberries.....	18	21	384,306	351,876	per 100. 1.10	per 100. 1.29	4,242.29	4,542.30
Total Value.....	—	—	—	—	—	—	127,658.28	249,083.80

28.—Total Quantities and Values of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by Provinces, during the years ended September 30, 1919 and 1920—concluded.

Description of Tree, Bush and Plant.	Varieties.		Sold.		Average price per Unit.		Total Value.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
	No.	No.	No.	No.	\$	\$	\$	\$
<b>British Columbia—</b>								
Apples—Early.....	7	4	11,467	10,404	·35	·57	4,092·75	5,936·45
Fall.....	6	3	20,644	19,283	·33	·51	6,721·80	9,888·75
Winter.....	22	20	89,156	123,874	·33	·46	30,950·65	57,344·55
Crab Apples.....	—	2	—	8,244	—	·37	—	3,037·90
Total Apples.....	—	29	121,267	161,805	·34	·47	41,765·20	76,207·65
Pears.....	5	10	22,462	26,723	·45	·72	9,899·75	19,170·40
Plums.....	9	12	10,064	13,917	·40	·70	4,931·00	9,684·70
Peaches.....	1	8	8,673	8,364	·41	·64	3,555·90	5,366·05
Cherries.....	8	8	10,185	12,446	·50	·75	5,057·90	9,333·70
Apricots.....	—	4	—	9,691	—	·66	—	6,403·20
<b>SMALL FRUITS—</b>								
Blackberries.....	—	4	—	585	—	·14	—	81·65
Currants.....	9	12	22,161	43,681	·30	·16	6,684·40	7,132·63
Grapes.....	6	7	5,507	5,388	·41	·22	2,251·00	1,183·30
Gooseberries.....	5	6	13,369	46,934	·24	·15	3,155·35	6,843·55
Raspberries.....	5	7	54,979	119,098	·07	·06	4,083·40	7,742·90
Mulberries.....	—	1	—	7	—	·35	—	2·45
Loganberries.....	1	1	330	28,057	·10	·22	33·00	6,111·40
Strawberries.....	5	7	219,679	912,900	per 100. 1·25	per 100. 1·15	2,727·50	10,528·00
Total Value.....	—	—	—	—	—	—	84,144·40	165,791·58
<b>Prairie Provinces—</b>								
Apples—Early.....	4	4	612	523	·81	1·17	496·37	611·25
Fall.....	1	1	10	23	1·00	1·50	10·00	34·50
Winter.....	1	1	382	142	·83	1·50	318·30	213·00
Crab Apples.....	—	6	—	1,513	—	1·15	—	1,746·50
Total Value.....	6	12	1,004	2,201	·82	1·18	824·67	2,605·25
Plums.....	7	14	2,708	10,558	1·15	·50	3,012·15	5,364·40
Cherries.....	5	3	1,512	1,088	·99	·90	1,493·25	974·30
<b>SMALL FRUITS—</b>								
Currants.....	6	13	19,852	24,618	·51	·44	10,119·91	10,849·36
Grapes.....	—	5	—	144	—	·90	—	128·02
Gooseberries.....	3	5	10,578	10,571	·61	·60	6,443·25	6,336·58
Raspberries.....	5	14	30,475	47,402	·28	·22	8,519·95	10,191·78
Strawberries.....	3	3	164,728	208,030	per 100. 8·00	per 100. 6·57	12,416·40	13,666·85
Total Value.....	—	—	—	—	—	—	42,829·58	50,116·54

The varieties of which most numbers were sold in 1920 were as follows, the corresponding number for 1919 being given within brackets: Early apples: Duchess of Oldenburg 33,066 (18,633); Yellow Transparent 19,138 (12,793); Fall apples: Wealthy 27,798 (23,938); Winter apples: McIntosh Red 77,933 (42,832); Fameuse (Snow) 29,137 (7,743); Delicious 26,566 (13,252); Northern Spy 20,604 (13,599); Wagener 15,830 (6,298); Jonathan 14,279 (4,501). Pears: Bartlett 28,304 (8,143); Flemish Beauty 8,070; Anjou (Beurre d'Anjou) 5,005 (1,110); Clapp 4,961 (3,002). Plums: Lombard 8,429 (2,498); Reine Claude 8,181 (2,864); Italian Prune 8,074



(270); Burbank 8,051 (2,610). Peaches: Elberta 12,302 (4,330); St. John 6,047 (3,145); Early Crawford 5,462 (3,852). Cherries: Montmorency 18,005 (6,344); Early Richmond 6,310 (295); Bing 4,513 (253); Windsor 3,320 (1,079); Black Tartarian 3,256 (150). Currants: Fay 35,777 (8,743); Champion 29,319 (20,372); Cherry 17,643 (5,098); Naples 14,957 (10,680); White Grape 14,641 (4,125); Boskoop Giant 12,524 (5,671); Lee 12,395 (6,348); Perfection 11,881 (6,705); Victoria 10,814 (528). Grapes: Concord 33,628 (15,946); Worden 10,909 (3,955); Niagara 10,559 (4,093). Gooseberries: Oregon Champion 43,195 (528); Downing 13,713 (5,483); Carrie 6,727 (6,789); Houghton 6,241 (4,489). Raspberries: Cuthbert 259,043 (54,530); Ranere 51,156; Herbert 38,976 (16,824); King 38,711 (8,574); Plum Farmer 27,275; Cumberland 15,514 (3,153); Turner 10,000; Marlboro 8,165 (1,375). Apricots: Moorpark 5,291; Strawberries: Senator Dunlap 1,358,754 (965,980); Magoun 658,700; Everbearing 172,843 (183,351); Paxton 107,000 (2,000); Marshall 90,300; Glen Mary 74,056 (17,460); Williams 51,900 (41,000); Progressive 26,075 (5,000); Belt 24,000 (2,515).

#### COLD STORAGE.

**Cold Storage of Perishable Products.**—Under the Cold Storage Act, 1907 (6-7 Edw. VII, c. 6), subsidies have been granted by the Dominion Government towards the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. Table 29 shows for 1922 the number of cold storage warehouses in Canada, with the refrigerated space. This amounts to 36,443,028 cubic feet, of which 5,244,358 cubic feet apply to warehouses subsidized under the Act and 31,198,670 cubic feet apply to non-subsidized warehouses.

#### 29.—Cold Storage Warehouses in Canada, 1922.

##### SUBSIDIZED PUBLIC WAREHOUSES.

Province.	Number.	Refrigerated Space.	Cost.	Total Subsidy.
		Cubic feet.	\$	\$
Prince Edward Island.....	1	200,000	50,000	15,000
Nova Scotia.....	3	571,440	287,237	78,171
New Brunswick.....	2	781,161	192,577	57,773
Quebec.....	2	248,394	245,287	73,586
Ontario.....	16	1,739,944	632,547	183,740
Manitoba.....	1	27,500	32,000	9,600
Saskatchewan.....	4	437,596	268,707	80,612
Alberta.....	2	351,159	242,000	72,600
British Columbia.....	3	887,164	458,000	137,400
Total subsidized.....	34	5,244,358	2,408,355	708,482

## 29.—Cold Storage Warehouses in Canada, 1922—concluded.

## SUBSIDIZED AND NON-SUBSIDIZED WAREHOUSES.

Province.	No.	Refrigerated Space.	Articles Stored.
Prince Edward Island.....	4	Cubic feet 241,700	1 Bait and Fish, 1 Eggs, 1 Fox meat and Meats, 1 Meat and General.
Nova Scotia.....	19	1,110,554	4 Bait and Fish, 1 Butter, 3 Butter and Ice Cream, 1 Dairy Products, Fish, Meats, 1 Eggs, 4 Fish, 3 Fish and Meat, 1 General, 1 Meat and Produce.
New Brunswick.....	24	975,391	18 Bait and Fish, 1 Butter, Eggs, Ice Cream, 1 Cured Meats, 1 Eggs, 2 General, 1 Meat and Poultry.
Quebec.....	60	8,692,779	1 Butter, 1 Butter and Eggs, 1 Butter, Eggs and Meats, 4 Butter and Ice Cream, 1 Butter and Meats, 2 Cured Meats, 2 Cured and Fresh Meats, 7 Dairy Products, 4 Dairy Products and Meats, 1 Dairy Products, Meats and Eggs, 1 Dairy and Packing House Products, 3 Fish, 1 Fish, Meat and Poultry, 1 Fruit, Meat Products and Vegetables, 10 General, 1 General and Packing House Products, 1 General, Meats and Poultry, 4 General and Meats, 3 Meats Poultry, 2 Meat Products, 9 Meats.
Ontario.....	122	11,593,875	16 Butter, 1 Butter and Cheese, 1 Butter and Dairy Products, 3 Butter and Eggs, 1 Butter, Eggs and Meats, 2 Butter, Eggs and Poultry, 1 Butter and Farm Products, 1 Butter and General, 11 Butter and Ice Cream, 1 Butter and Meats, 1 Butter and Milk, 1 Cheese and Meats, 4 Cured Meats, 1 Cured Meats and Fish, 1 Dairy Products and Eggs, 4 Dairy Products, Eggs and Meats, 1 Dairy and Farm Products, 1 Dairy Products and Meats, 1 Dairy Products, Meats and Poultry, 5 Dairy and Packing House Products, 1 Eggs, 5 Eggs and General, 12 Fish, 1 Fish and Fruit, 1 Fish and General, 2 Fish and Meats, 1 Fish, Meats and General, 3 Fruit, 4 Fruit and Jams, 1 Fruit and Meats, 1 Fruit and Meat Products, 1 Fruit and Vegetables, 21 General, 1 General Produce, 1 Hog Products, 5 Meats, 3 Meats and General.
Manitoba.....	42	4,006,147	2 Butter, 5 Butter and Ice Cream, 1 Butter and Meats, 1 Dairy Products and General, 2 Dairy Products and Meats, 15 Fish, 1 Fish and Poultry, 6 General, 6 Meats, 2 Meats and General, 1 Packing House Products.
Saskatchewan.....	30	1,695,289	5 Butter, 1 Butter, Eggs and Meats, 8 Butter and Ice Cream, 1 Eggs and General, 3 Fish, Meats and General, 7 General, 1 Meats, 3 Meats and General, 1 Packing House Products,
Alberta.....	20	3,808,835	1 Butter, 1 Butter, Eggs, Meats and Poultry, 5 Butter and Ice Cream, 1 Eggs and Fruit, 1 Fish, Meats and General, 1 Fish, Meats and Poultry, 3 General, 4 Meats, 3 Packing House Products and General.
British Columbia.....	41	4,274,008	3 Butter, 1 Butter and General, 2 Butter and Ice Cream, 1 Butter and Meats, 9 Fish, 1 Fish and General, 1 Fish and Meats, 3 Fish, Meats and General, 2 Fruit, 1 Fruit and Jams, 10 General, 2 Meats, 2 Meats and General, 1 Packing House Products, 1 Packing House Products and Eggs, 1 Packing House Products and General.
Yukon.....	1	44,900	1 Fish.
<b>Totals.....</b>	<b>363</b>	<b>36,443,028</b>	

## PRICES OF AGRICULTURAL PRODUCE.

Tables 30 to 35 record the average prices of Canadian agricultural produce and Table 36 the yearly average prices from 1902 of British-grown wheat, barley and oats. Tables 30 to 34 record the average prices of Canadian grain at Winnipeg and Fort William, weekly, for the weeks ended Saturday during the year 1921 (Tables 30, 32, 33) and in monthly averages for the two years 1920 and 1921 (Tables 31, 34). Table 35 gives the monthly range of average prices in British markets of Canadian wheat and oats for the years 1920 and 1921, the English currency, weights and measures having been converted into Canadian equivalent denominations at the par rate of exchange. Table 37 gives the monthly average prices of flour, bran and shorts at principal markets in 1921, Table 38 the average prices of Canadian live stock at principal markets for the three years 1919 to 1921 and Table 39 the average monthly prices of selected descriptions of Canadian live stock at principal markets in 1921. The last-named table is an abridgment of the more detailed classification appearing in the Monthly Bulletin of Agricultural Statistics. Tables 40 and 41 give the average prices paid to and paid by farmers in Canada for clover and grass seed in 1921 and 1922.

## 30.—Weekly Range of Prices of Wheat at Winnipeg and Fort William, 1921.

(Per bushel of 60 lb.)

SOURCE: Board of Grain Commissioners for Canada.

Date.	No. 1 Northern.	No. 2 Northern.	No. 3 Northern.	No. 4.	No. 5.	No. 6.	Feed.
	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
1921.							
January 5....	1.92½-2.00½	1.85½-1.98½	1.81½-1.89½	1.72½-1.81½	1.57½-1.66½	1.47½-1.52½	1.37½-1.42½
" 15....	1.94½-2.04	1.91½-2.02½	1.86½-1.95½	1.78½-1.87	1.63½-1.72	1.53½-1.60	1.45½-1.51½
" 22....	1.88-1.98	1.84½-1.95½	1.80-1.90½	1.72½-1.83½	1.60½-1.68½	1.44½-1.55½	1.35½-1.46½
" 29....	1.83-1.93½	1.80-1.90½	1.75-1.85½	1.69-1.78½	1.55-1.65½	1.40-1.50½	1.30-1.40½
Average....	1.89½-1.99½	1.86½-1.96½	1.80½-1.90½	1.73½-1.82½	1.59½-1.68½	1.46½-1.54½	1.37½-1.45½
February 5....	1.71½-1.80½	1.68½-1.77½	1.64½-1.73½	1.58½-1.66½	1.45½-1.53½	1.30½-1.37½	1.20½-1.27½
" 12....	1.80½-1.94	1.77½-1.91½	1.73½-1.87½	1.66½-1.80½	1.52½-1.68½	1.35½-1.49½	1.25½-1.39½
" 19....	1.89-1.97	1.86-1.94½	1.82-1.90½	1.77-1.85	1.67-1.74	1.43-1.55	1.38-1.45
" 26....	1.90½-1.94½	1.87½-1.91½	1.83½-1.87½	1.78½-1.82½	1.68½-1.72½	1.50½-1.54½	1.38½-1.42½
Average....	1.83-1.91½	1.80-1.88½	1.75½-1.84½	1.70½-1.78½	1.58½-1.67	1.41½-1.49	1.30½-1.38½
March 5....	1.91½-1.98½	1.88½-1.95½	1.84½-1.91½	1.79½-1.84½	1.67½-1.75½	1.49½-1.57½	1.37½-1.48½
" 12....	1.90½-1.96	1.87½-1.93½	1.83½-1.89½	1.77½-1.82½	1.65½-1.74½	1.52½-1.57½	1.42½-1.48½
" 19....	1.84-1.87	1.81-1.84	1.77-1.80½	1.69-1.74½	1.61-1.67	1.45-1.51½	1.35-1.41½
" 26....	1.87-1.91½	1.84-1.88½	1.80-1.84½	1.71-1.74½	1.63-1.66½	1.48-1.51½	1.38-1.41½
Average....	1.88½-1.93½	1.85½-1.90½	1.81½-1.86½	1.74½-1.79½	1.65½-1.71½	1.49-1.54½	1.38½-1.45½
April 2....	1.78½-1.94½	1.75½-1.91½	1.71½-1.87½	1.61½-1.77½	1.52½-1.69	1.38½-1.54	1.28½-1.44
" 9....	1.77½-1.82½	1.74½-1.77½	1.70½-1.73½	1.60½-1.63	1.51½-1.54	1.37½-1.40	1.27½-1.30
" 16....	1.69½-1.80	1.53½-1.76	1.51½-1.71½	1.40½-1.60½	1.36½-1.50½	1.22½-1.36½	1.12½-1.26½
" 23....	1.70½-1.83½	1.63½-1.80	1.60½-1.76½	1.44½-1.59½	1.37½-1.52½	1.20½-1.35½	-
" 30....	1.75½-1.80	1.68½-1.73½	1.61½-1.69	1.48½-1.53	1.40½-1.46	1.29-1.29	-
Average....	1.72½-1.84½	1.67-1.80	1.63-1.75½	1.51½-1.62½	1.43½-1.54½	1.29½-1.39	1.23-1.33½

## 30.—Weekly Range of Prices of Wheat at Winnipeg and Fort William, 1921.—concluded.

SOURCE: Board of Grain Commissioners for Canada.

Date.	No. 1 Northern.	No. 2 Northern.	No. 3 Northern.	No. 4.	No. 5.	No. 6.	Feed.
	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
1921.							
May 7.....	1.79 <sup>5</sup> / <sub>8</sub> -1.88 <sup>3</sup> / <sub>8</sub>	1.75 <sup>5</sup> / <sub>8</sub> -1.84 <sup>3</sup> / <sub>8</sub>	1.68 <sup>5</sup> / <sub>8</sub> -1.78 <sup>3</sup> / <sub>8</sub>	1.56 <sup>3</sup> / <sub>8</sub> -1.66 <sup>3</sup> / <sub>8</sub>	1.45 <sup>3</sup> / <sub>8</sub> -1.55 <sup>3</sup> / <sub>8</sub>	- -	- -
" 14.....	1.78 <sup>3</sup> / <sub>8</sub> -1.84 <sup>3</sup> / <sub>8</sub>	1.77 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.72 <sup>3</sup> / <sub>8</sub> -1.78 <sup>3</sup> / <sub>8</sub>	1.52 <sup>3</sup> / <sub>8</sub> -1.67 <sup>3</sup> / <sub>8</sub>	1.42 <sup>3</sup> / <sub>8</sub> -1.49 <sup>3</sup> / <sub>8</sub>	1.27 <sup>3</sup> / <sub>8</sub> -1.30 <sup>3</sup> / <sub>8</sub>	- -
" 21.....	1.79 <sup>3</sup> / <sub>8</sub> -1.92 <sup>3</sup> / <sub>8</sub>	1.77 <sup>3</sup> / <sub>8</sub> -1.89 <sup>3</sup> / <sub>8</sub>	1.72 <sup>3</sup> / <sub>8</sub> -1.85 <sup>3</sup> / <sub>8</sub>	1.56 <sup>3</sup> / <sub>8</sub> -1.76 <sup>3</sup> / <sub>8</sub>	1.44 <sup>3</sup> / <sub>8</sub> -1.65 <sup>3</sup> / <sub>8</sub>	1.29 <sup>3</sup> / <sub>8</sub> -1.49 <sup>3</sup> / <sub>8</sub>	1.30 <sup>3</sup> / <sub>8</sub> -1.34 <sup>3</sup> / <sub>8</sub>
" 28.....	1.87-1.94 <sup>1</sup> / <sub>2</sub>	1.84-1.91 <sup>1</sup> / <sub>2</sub>	1.80-1.87 <sup>1</sup> / <sub>2</sub>	1.69 <sup>1</sup> / <sub>2</sub> -1.74 <sup>1</sup> / <sub>2</sub>	1.52 <sup>3</sup> / <sub>8</sub> -1.54 <sup>3</sup> / <sub>8</sub>	1.37 <sup>3</sup> / <sub>8</sub> -1.39 <sup>3</sup> / <sub>8</sub>	- -
Average.....	1.81 <sup>1</sup> / <sub>2</sub> -1.89 <sup>3</sup> / <sub>8</sub>	1.78 <sup>3</sup> / <sub>8</sub> -1.86 <sup>3</sup> / <sub>8</sub>	1.73 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.58 <sup>1</sup> / <sub>2</sub> -1.70 <sup>3</sup> / <sub>8</sub>	1.46 <sup>3</sup> / <sub>8</sub> -1.56 <sup>3</sup> / <sub>8</sub>	1.31 <sup>3</sup> / <sub>8</sub> -1.39 <sup>3</sup> / <sub>8</sub>	1.30 <sup>3</sup> / <sub>8</sub> -1.34 <sup>3</sup> / <sub>8</sub>
June 4.....	1.88-1.95 <sup>3</sup> / <sub>8</sub>	1.84-1.91 <sup>3</sup> / <sub>8</sub>	1.83-1.85 <sup>3</sup> / <sub>8</sub>	1.73-1.76 <sup>3</sup> / <sub>8</sub>	1.56-1.64 <sup>3</sup> / <sub>8</sub>	1.41-1.42 <sup>3</sup> / <sub>8</sub>	- -
" 11.....	1.89-1.93 <sup>3</sup> / <sub>8</sub>	1.86 <sup>3</sup> / <sub>8</sub> -1.92 <sup>3</sup> / <sub>8</sub>	1.79 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.71 <sup>3</sup> / <sub>8</sub> -1.76 <sup>3</sup> / <sub>8</sub>	1.59 <sup>3</sup> / <sub>8</sub> -1.63 <sup>3</sup> / <sub>8</sub>	- -	- -
" 18.....	1.82 <sup>3</sup> / <sub>8</sub> -1.89 <sup>3</sup> / <sub>8</sub>	1.81 <sup>3</sup> / <sub>8</sub> -1.87 <sup>3</sup> / <sub>8</sub>	1.74 <sup>3</sup> / <sub>8</sub> -1.79 <sup>3</sup> / <sub>8</sub>	1.66 <sup>3</sup> / <sub>8</sub> -1.72 <sup>3</sup> / <sub>8</sub>	1.56 <sup>3</sup> / <sub>8</sub> -1.59 <sup>3</sup> / <sub>8</sub>	- -	- -
" 25.....	1.84 <sup>3</sup> / <sub>8</sub> -1.92 <sup>3</sup> / <sub>8</sub>	1.82 <sup>3</sup> / <sub>8</sub> -1.89 <sup>3</sup> / <sub>8</sub>	1.77 <sup>3</sup> / <sub>8</sub> -1.86 <sup>3</sup> / <sub>8</sub>	1.66 <sup>3</sup> / <sub>8</sub> -1.73 <sup>3</sup> / <sub>8</sub>	- -	- -	- -
" 30.....	1.84 <sup>3</sup> / <sub>8</sub> -1.89 <sup>3</sup> / <sub>8</sub>	1.81 <sup>3</sup> / <sub>8</sub> -1.86 <sup>3</sup> / <sub>8</sub>	1.78 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.67-1.72 <sup>3</sup> / <sub>8</sub>	- -	- -	- -
Average.....	1.85 <sup>3</sup> / <sub>8</sub> -1.92 <sup>3</sup> / <sub>8</sub>	1.83 <sup>3</sup> / <sub>8</sub> -1.89 <sup>3</sup> / <sub>8</sub>	1.78 <sup>3</sup> / <sub>8</sub> -1.83 <sup>3</sup> / <sub>8</sub>	1.69 <sup>3</sup> / <sub>8</sub> -1.74 <sup>3</sup> / <sub>8</sub>	1.57 <sup>1</sup> / <sub>2</sub> -1.62 <sup>3</sup> / <sub>8</sub>	1.41-1.42 <sup>3</sup> / <sub>8</sub>	- -
July 9.....	1.81 <sup>3</sup> / <sub>8</sub> -1.83 <sup>3</sup> / <sub>8</sub>	1.79 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.76 <sup>3</sup> / <sub>8</sub> -1.79 <sup>3</sup> / <sub>8</sub>	1.61 <sup>3</sup> / <sub>8</sub> -1.62 <sup>3</sup> / <sub>8</sub>	1.40 <sup>3</sup> / <sub>8</sub> -1.40 <sup>3</sup> / <sub>8</sub>	1.30 <sup>3</sup> / <sub>8</sub> -1.30 <sup>3</sup> / <sub>8</sub>	1.15 <sup>3</sup> / <sub>8</sub> -1.15 <sup>3</sup> / <sub>8</sub>
" 16.....	1.74 <sup>3</sup> / <sub>8</sub> -1.81 <sup>3</sup> / <sub>8</sub>	1.71 <sup>3</sup> / <sub>8</sub> -1.84 <sup>3</sup> / <sub>8</sub>	1.68 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	- -	- -	- -	- -
" 23.....	1.82 <sup>3</sup> / <sub>8</sub> -1.86 <sup>3</sup> / <sub>8</sub>	1.80-1.83 <sup>3</sup> / <sub>8</sub>	1.76-1.79 <sup>3</sup> / <sub>8</sub>	1.62 <sup>3</sup> / <sub>8</sub> -1.65 <sup>3</sup> / <sub>8</sub>	- -	- -	- -
" 30.....	1.78-1.84 <sup>3</sup> / <sub>8</sub>	1.75-1.82 <sup>3</sup> / <sub>8</sub>	1.71-1.77 <sup>3</sup> / <sub>8</sub>	1.53-1.64 <sup>3</sup> / <sub>8</sub>	1.38-1.38 <sup>3</sup> / <sub>8</sub>	1.23 <sup>3</sup> / <sub>8</sub>	- -
Average.....	1.79 <sup>3</sup> / <sub>8</sub> -1.85 <sup>3</sup> / <sub>8</sub>	1.76 <sup>3</sup> / <sub>8</sub> -1.83 <sup>3</sup> / <sub>8</sub>	1.73-1.79 <sup>3</sup> / <sub>8</sub>	1.59 <sup>3</sup> / <sub>8</sub> -1.63 <sup>3</sup> / <sub>8</sub>	1.39 <sup>3</sup> / <sub>8</sub> -1.39 <sup>3</sup> / <sub>8</sub>	1.28 <sup>3</sup> / <sub>8</sub> -1.30 <sup>3</sup> / <sub>8</sub>	1.15 <sup>3</sup> / <sub>8</sub> -1.15 <sup>3</sup> / <sub>8</sub>
August 6.....	1.76 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.73 <sup>3</sup> / <sub>8</sub> -1.79 <sup>3</sup> / <sub>8</sub>	1.68 <sup>3</sup> / <sub>8</sub> -1.75 <sup>3</sup> / <sub>8</sub>	1.48 <sup>3</sup> / <sub>8</sub> -1.56 <sup>3</sup> / <sub>8</sub>	1.34 <sup>3</sup> / <sub>8</sub> -1.41 <sup>3</sup> / <sub>8</sub>	1.20 <sup>3</sup> / <sub>8</sub> -1.26 <sup>3</sup> / <sub>8</sub>	1.02-1.05 <sup>3</sup> / <sub>8</sub>
" 13.....	1.80 <sup>3</sup> / <sub>8</sub> -1.90 <sup>3</sup> / <sub>8</sub>	1.76 <sup>3</sup> / <sub>8</sub> -1.82 <sup>3</sup> / <sub>8</sub>	1.67 <sup>3</sup> / <sub>8</sub> -1.77 <sup>3</sup> / <sub>8</sub>	1.53-1.57 <sup>3</sup> / <sub>8</sub>	1.38-1.41 <sup>3</sup> / <sub>8</sub>	- -	- -
" 20.....	1.80 <sup>3</sup> / <sub>8</sub> -1.92 <sup>3</sup> / <sub>8</sub>	1.72 <sup>3</sup> / <sub>8</sub> -1.81 <sup>3</sup> / <sub>8</sub>	1.63 <sup>3</sup> / <sub>8</sub> -1.72 <sup>3</sup> / <sub>8</sub>	1.43 <sup>3</sup> / <sub>8</sub> -1.54 <sup>3</sup> / <sub>8</sub>	1.28 <sup>3</sup> / <sub>8</sub> -1.39 <sup>3</sup> / <sub>8</sub>	1.20 <sup>3</sup> / <sub>8</sub> -1.24 <sup>3</sup> / <sub>8</sub>	- -
" 27.....	1.69 <sup>3</sup> / <sub>8</sub> -1.84 <sup>3</sup> / <sub>8</sub>	1.67 <sup>3</sup> / <sub>8</sub> -1.77 <sup>3</sup> / <sub>8</sub>	1.58 <sup>3</sup> / <sub>8</sub> -1.67 <sup>3</sup> / <sub>8</sub>	1.41 <sup>3</sup> / <sub>8</sub> -1.48 <sup>3</sup> / <sub>8</sub>	1.26 <sup>3</sup> / <sub>8</sub> -1.31 <sup>3</sup> / <sub>8</sub>	1.11 <sup>3</sup> / <sub>8</sub> -1.16 <sup>3</sup> / <sub>8</sub>	- -
Average.....	1.76 <sup>3</sup> / <sub>8</sub> -1.87 <sup>3</sup> / <sub>8</sub>	1.72 <sup>3</sup> / <sub>8</sub> -1.80 <sup>3</sup> / <sub>8</sub>	1.64 <sup>3</sup> / <sub>8</sub> -1.73 <sup>3</sup> / <sub>8</sub>	1.46 <sup>3</sup> / <sub>8</sub> -1.54 <sup>3</sup> / <sub>8</sub>	1.31 <sup>3</sup> / <sub>8</sub> -1.38 <sup>3</sup> / <sub>8</sub>	1.17 <sup>3</sup> / <sub>8</sub> -1.22 <sup>3</sup> / <sub>8</sub>	1.02-1.05 <sup>3</sup> / <sub>8</sub>
September 3..	1.50-1.71 <sup>3</sup> / <sub>8</sub>	1.42 <sup>3</sup> / <sub>8</sub> -1.68 <sup>3</sup> / <sub>8</sub>	1.40-1.59 <sup>3</sup> / <sub>8</sub>	1.29-1.41 <sup>3</sup> / <sub>8</sub>	1.16 <sup>3</sup> / <sub>8</sub> -1.26 <sup>3</sup> / <sub>8</sub>	1.01 <sup>3</sup> / <sub>8</sub> -1.11 <sup>3</sup> / <sub>8</sub>	- -
" 10.....	1.52 <sup>3</sup> / <sub>8</sub> -1.64 <sup>3</sup> / <sub>8</sub>	1.43 <sup>3</sup> / <sub>8</sub> -1.56 <sup>3</sup> / <sub>8</sub>	1.39 <sup>3</sup> / <sub>8</sub> -1.51 <sup>3</sup> / <sub>8</sub>	1.29 <sup>3</sup> / <sub>8</sub> -1.38 <sup>3</sup> / <sub>8</sub>	1.17 <sup>3</sup> / <sub>8</sub> -1.24 <sup>3</sup> / <sub>8</sub>	- -	- -
" 17.....	1.42 <sup>3</sup> / <sub>8</sub> -1.55 <sup>3</sup> / <sub>8</sub>	1.39 <sup>3</sup> / <sub>8</sub> -1.50 <sup>3</sup> / <sub>8</sub>	1.34 <sup>3</sup> / <sub>8</sub> -1.43 <sup>3</sup> / <sub>8</sub>	1.26 <sup>3</sup> / <sub>8</sub> -1.32 <sup>3</sup> / <sub>8</sub>	1.14 <sup>3</sup> / <sub>8</sub> -1.20 <sup>3</sup> / <sub>8</sub>	1.04 <sup>3</sup> / <sub>8</sub>	0.94 <sup>3</sup> / <sub>8</sub>
" 24.....	1.42 <sup>3</sup> / <sub>8</sub> -1.45 <sup>3</sup> / <sub>8</sub>	1.39 <sup>3</sup> / <sub>8</sub> -1.42 <sup>3</sup> / <sub>8</sub>	1.35 <sup>3</sup> / <sub>8</sub> -1.38 <sup>3</sup> / <sub>8</sub>	1.29 <sup>3</sup> / <sub>8</sub> -1.32 <sup>3</sup> / <sub>8</sub>	1.17-1.19 <sup>3</sup> / <sub>8</sub>	1.07-1.09 <sup>3</sup> / <sub>8</sub>	0.97-0.99 <sup>3</sup> / <sub>8</sub>
Average.....	1.46 <sup>3</sup> / <sub>8</sub> -1.59 <sup>3</sup> / <sub>8</sub>	1.41 <sup>3</sup> / <sub>8</sub> -1.54 <sup>3</sup> / <sub>8</sub>	1.37 <sup>3</sup> / <sub>8</sub> -1.48 <sup>3</sup> / <sub>8</sub>	1.28 <sup>3</sup> / <sub>8</sub> -1.36 <sup>3</sup> / <sub>8</sub>	1.18 <sup>3</sup> / <sub>8</sub> -1.22 <sup>3</sup> / <sub>8</sub>	1.04 <sup>3</sup> / <sub>8</sub> -1.10 <sup>3</sup> / <sub>8</sub>	0.95 <sup>3</sup> / <sub>8</sub> -0.99 <sup>3</sup> / <sub>8</sub>
October 1....	1.28 <sup>3</sup> / <sub>8</sub> -1.38 <sup>3</sup> / <sub>8</sub>	1.27 <sup>3</sup> / <sub>8</sub> -1.35 <sup>3</sup> / <sub>8</sub>	1.23-1.31 <sup>3</sup> / <sub>8</sub>	1.17 <sup>3</sup> / <sub>8</sub> -1.25 <sup>3</sup> / <sub>8</sub>	1.05 <sup>3</sup> / <sub>8</sub> -1.12 <sup>3</sup> / <sub>8</sub>	0.95 <sup>3</sup> / <sub>8</sub> -1.02 <sup>3</sup> / <sub>8</sub>	0.85 <sup>3</sup> / <sub>8</sub> -0.92 <sup>3</sup> / <sub>8</sub>
" 8.....	1.13 <sup>3</sup> / <sub>8</sub> -1.27 <sup>3</sup> / <sub>8</sub>	1.12 <sup>3</sup> / <sub>8</sub> -1.26 <sup>3</sup> / <sub>8</sub>	1.10-1.22 <sup>3</sup> / <sub>8</sub>	1.04-1.16 <sup>3</sup> / <sub>8</sub>	0.94 <sup>3</sup> / <sub>8</sub> -1.04 <sup>3</sup> / <sub>8</sub>	0.84 <sup>3</sup> / <sub>8</sub> -0.94 <sup>3</sup> / <sub>8</sub>	0.74 <sup>3</sup> / <sub>8</sub> -0.84 <sup>3</sup> / <sub>8</sub>
" 15.....	1.17-1.21 <sup>3</sup> / <sub>8</sub>	1.14 <sup>3</sup> / <sub>8</sub> -1.20 <sup>3</sup> / <sub>8</sub>	1.11 <sup>3</sup> / <sub>8</sub> -1.16 <sup>3</sup> / <sub>8</sub>	1.05 <sup>3</sup> / <sub>8</sub> -1.11 <sup>3</sup> / <sub>8</sub>	0.97 <sup>3</sup> / <sub>8</sub> -1.03 <sup>3</sup> / <sub>8</sub>	0.87 <sup>3</sup> / <sub>8</sub> -0.93 <sup>3</sup> / <sub>8</sub>	0.77 <sup>3</sup> / <sub>8</sub> -0.83 <sup>3</sup> / <sub>8</sub>
" 22.....	1.08 <sup>3</sup> / <sub>8</sub> -1.16 <sup>3</sup> / <sub>8</sub>	1.06 <sup>3</sup> / <sub>8</sub> -1.13 <sup>3</sup> / <sub>8</sub>	1.02-1.08 <sup>3</sup> / <sub>8</sub>	0.94-1.01 <sup>3</sup> / <sub>8</sub>	0.87 <sup>3</sup> / <sub>8</sub> -0.94 <sup>3</sup> / <sub>8</sub>	0.78 <sup>3</sup> / <sub>8</sub> -0.84 <sup>3</sup> / <sub>8</sub>	0.68 <sup>3</sup> / <sub>8</sub> -0.75 <sup>3</sup> / <sub>8</sub>
" 29.....	1.09 <sup>3</sup> / <sub>8</sub> -1.12 <sup>3</sup> / <sub>8</sub>	1.06 <sup>3</sup> / <sub>8</sub> -1.10 <sup>3</sup> / <sub>8</sub>	1.02 <sup>3</sup> / <sub>8</sub> -1.05 <sup>3</sup> / <sub>8</sub>	0.95 <sup>3</sup> / <sub>8</sub> -0.98 <sup>3</sup> / <sub>8</sub>	0.89-0.92 <sup>3</sup> / <sub>8</sub>	0.80-0.83 <sup>3</sup> / <sub>8</sub>	0.70-0.73 <sup>3</sup> / <sub>8</sub>
Average.....	1.15 <sup>3</sup> / <sub>8</sub> -1.23 <sup>3</sup> / <sub>8</sub>	1.13 <sup>3</sup> / <sub>8</sub> -1.21 <sup>3</sup> / <sub>8</sub>	1.09 <sup>3</sup> / <sub>8</sub> -1.16 <sup>3</sup> / <sub>8</sub>	1.03 <sup>3</sup> / <sub>8</sub> -1.10 <sup>3</sup> / <sub>8</sub>	0.94 <sup>3</sup> / <sub>8</sub> -1.01 <sup>3</sup> / <sub>8</sub>	0.85-0.91 <sup>3</sup> / <sub>8</sub>	0.75-0.81 <sup>3</sup> / <sub>8</sub>
November 5..	1.02-1.10 <sup>3</sup> / <sub>8</sub>	0.99 <sup>3</sup> / <sub>8</sub> -1.08 <sup>3</sup> / <sub>8</sub>	0.94 <sup>3</sup> / <sub>8</sub> -1.03 <sup>3</sup> / <sub>8</sub>	0.88 <sup>3</sup> / <sub>8</sub> -0.97 <sup>3</sup> / <sub>8</sub>	0.82 <sup>3</sup> / <sub>8</sub> -0.92 <sup>3</sup> / <sub>8</sub>	0.73 <sup>3</sup> / <sub>8</sub> -0.82 <sup>3</sup> / <sub>8</sub>	0.63 <sup>3</sup> / <sub>8</sub> -0.72 <sup>3</sup> / <sub>8</sub>
" 12.....	1.09 <sup>3</sup> / <sub>8</sub> -1.12 <sup>3</sup> / <sub>8</sub>	1.06 <sup>3</sup> / <sub>8</sub> -1.09 <sup>3</sup> / <sub>8</sub>	1.00 <sup>3</sup> / <sub>8</sub> -1.03 <sup>3</sup> / <sub>8</sub>	0.95 <sup>3</sup> / <sub>8</sub> -0.99 <sup>3</sup> / <sub>8</sub>	0.90-0.92 <sup>3</sup> / <sub>8</sub>	0.82-0.84 <sup>3</sup> / <sub>8</sub>	0.72 <sup>3</sup> / <sub>8</sub> -0.75 <sup>3</sup> / <sub>8</sub>
" 19.....	1.07-1.11 <sup>3</sup> / <sub>8</sub>	1.04-1.08 <sup>3</sup> / <sub>8</sub>	0.98 <sup>3</sup> / <sub>8</sub> -1.02 <sup>3</sup> / <sub>8</sub>	0.95-0.98 <sup>3</sup> / <sub>8</sub>	0.87 <sup>3</sup> / <sub>8</sub> -0.91 <sup>3</sup> / <sub>8</sub>	0.79 <sup>3</sup> / <sub>8</sub> -0.83 <sup>3</sup> / <sub>8</sub>	0.70 <sup>3</sup> / <sub>8</sub> -0.75 <sup>3</sup> / <sub>8</sub>
" 26.....	1.13 <sup>3</sup> / <sub>8</sub> -1.16 <sup>3</sup> / <sub>8</sub>	1.10 <sup>3</sup> / <sub>8</sub> -1.14 <sup>3</sup> / <sub>8</sub>	1.03 <sup>3</sup> / <sub>8</sub> -1.07 <sup>3</sup> / <sub>8</sub>	0.98 <sup>3</sup> / <sub>8</sub> -1.00 <sup>3</sup> / <sub>8</sub>	0.85-0.90 <sup>3</sup> / <sub>8</sub>	0.78-0.83 <sup>3</sup> / <sub>8</sub>	0.70-0.75 <sup>3</sup> / <sub>8</sub>
Average.....	1.08-1.13 <sup>3</sup> / <sub>8</sub>	1.05-1.10 <sup>3</sup> / <sub>8</sub>	0.99 <sup>3</sup> / <sub>8</sub> -1.04 <sup>3</sup> / <sub>8</sub>	0.94 <sup>3</sup> / <sub>8</sub> -0.99 <sup>3</sup> / <sub>8</sub>	0.86 <sup>3</sup> / <sub>8</sub> -0.91 <sup>3</sup> / <sub>8</sub>	0.78 <sup>3</sup> / <sub>8</sub> -0.83 <sup>3</sup> / <sub>8</sub>	0.69 <sup>3</sup> / <sub>8</sub> -0.74 <sup>3</sup> / <sub>8</sub>
December 3..	1.15 <sup>3</sup> / <sub>8</sub> -1.19 <sup>3</sup> / <sub>8</sub>	1.11 <sup>3</sup> / <sub>8</sub> -1.14 <sup>3</sup> / <sub>8</sub>	1.02 <sup>3</sup> / <sub>8</sub> -1.07 <sup>3</sup> / <sub>8</sub>	0.98 <sup>3</sup> / <sub>8</sub> -1.01 <sup>3</sup> / <sub>8</sub>	0.85-0.88 <sup>3</sup> / <sub>8</sub>	0.78-0.79 <sup>3</sup> / <sub>8</sub>	0.70-0.71 <sup>3</sup> / <sub>8</sub>
" 10.....	1.12 <sup>3</sup> / <sub>8</sub> -1.18 <sup>3</sup> / <sub>8</sub>	1.06 <sup>3</sup> / <sub>8</sub> -1.13 <sup>3</sup> / <sub>8</sub>	1.00 <sup>3</sup> / <sub>8</sub> -1.06 <sup>3</sup> / <sub>8</sub>	0.93 <sup>3</sup> / <sub>8</sub> -0.98 <sup>3</sup> / <sub>8</sub>	0.84-0.87 <sup>3</sup> / <sub>8</sub>	0.75-0.78 <sup>3</sup> / <sub>8</sub>	0.67-0.70 <sup>3</sup> / <sub>8</sub>
" 17.....	1.05 <sup>3</sup> / <sub>8</sub> -1.14 <sup>3</sup> / <sub>8</sub>	0.99 <sup>3</sup> / <sub>8</sub> -1.08 <sup>3</sup> / <sub>8</sub>	0.94 <sup>3</sup> / <sub>8</sub> -1.00 <sup>3</sup> / <sub>8</sub>	0.87 <sup>3</sup> / <sub>8</sub> -0.91 <sup>3</sup> / <sub>8</sub>	0.79 <sup>3</sup> / <sub>8</sub> -0.84 <sup>3</sup> / <sub>8</sub>	0.70 <sup>3</sup> / <sub>8</sub> -0.75 <sup>3</sup> / <sub>8</sub>	0.62 <sup>3</sup> / <sub>8</sub> -0.69 <sup>3</sup> / <sub>8</sub>
" 24.....	1.12 <sup>3</sup> / <sub>8</sub> -1.15 <sup>3</sup> / <sub>8</sub>	1.06 <sup>3</sup> / <sub>8</sub> -1.09 <sup>3</sup> / <sub>8</sub>	1.00 <sup>3</sup> / <sub>8</sub> -1.03 <sup>3</sup> / <sub>8</sub>	0.91-0.95 <sup>3</sup> / <sub>8</sub>	0.85-0.88 <sup>3</sup> / <sub>8</sub>	0.76-0.80 <sup>3</sup> / <sub>8</sub>	0.70-0.74 <sup>3</sup> / <sub>8</sub>
" 31.....	1.11 <sup>3</sup> / <sub>8</sub> -1.13 <sup>3</sup> / <sub>8</sub>	1.05 <sup>3</sup> / <sub>8</sub> -1.08 <sup>3</sup> / <sub>8</sub>	0.98 <sup>3</sup> / <sub>8</sub> -1.02 <sup>3</sup> / <sub>8</sub>	0.92 <sup>3</sup> / <sub>8</sub> -0.95 <sup>3</sup> / <sub>8</sub>	0.85 <sup>3</sup> / <sub>8</sub> -0.89 <sup>3</sup> / <sub>8</sub>	0.76 <sup>3</sup> / <sub>8</sub> -0.79 <sup>3</sup> / <sub>8</sub>	0.70 <sup>3</sup> / <sub>8</sub> -0.73 <sup>3</sup> / <sub>8</sub>
Average.....	1.11 <sup>3</sup> / <sub>8</sub> -1.16 <sup>3</sup> / <sub>8</sub>	1.05 <sup>3</sup> / <sub>8</sub> -1.10 <sup>3</sup> / <sub>8</sub>	0.99 <sup>3</sup> / <sub>8</sub> -1.04 <sup>3</sup> / <sub>8</sub>	0.92 <sup>3</sup> / <sub>8</sub> -0.96 <sup>3</sup> / <sub>8</sub>	0.83 <sup>3</sup> / <sub>8</sub> -0.87 <sup>3</sup> / <sub>8</sub>	0.75 <sup>3</sup> / <sub>8</sub> -0.78 <sup>3</sup> / <sub>8</sub>	0.68-0.71 <sup>3</sup> / <sub>8</sub>



### 31.—Monthly Range of Average Prices of Wheat at Winnipeg and Fort William, 1920-1921.

(Per bushel of 60 lb.)

SOURCE: Board of Grain Commissioners for Canada.

Date.	No.1 Northern.	No. 2 Northern.	No. 3 Northern.	No. 4.	No. 5.	No. 6.	Feed.
Averages for	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
January 1920..	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921..	1.89½-1.99½	1.86½-1.96½	1.80½-1.90½	1.73½-1.82½	1.59½-1.68½	1.46½-1.54½	1.37½-1.45½
February 1920..	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921..	1.83 -1.91½	1.80 -1.88½	1.75½-1.84½	1.70½-1.78½	1.58½-1.67	1.41½-1.49	1.30½-1.38½
March 1920....	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921....	1.88½-1.93½	1.85½-1.90½	1.81½-1.86½	1.74½-1.79½	1.65½-1.71½	1.49 -1.54½	1.38½-1.45½
April 1920.....	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921.....	1.72½-1.84½	1.67 -1.80	1.63 -1.75½	1.51½-1.62½	1.43½-1.54½	1.29½-1.39	1.23 -1.33½
May 1920.....	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921.....	1.81½-1.89½	1.78½-1.86½	1.73½-1.82½	1.58½-1.70½	1.46½-1.56½	1.31½-1.39½	1.30½-1.34
June 1920....	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921....	1.85½-1.92½	1.83½-1.89½	1.78½-1.83½	1.69½-1.74½	1.57½-1.62½	1.41 -1.42½	- -
July 1920.....	2.15 -	2.12 -	2.08 -	2.02 -	1.91 -	1.81 -	1.71 -
" 1921.....	1.79½-1.85½	1.76½-1.83	1.73 -1.79½	1.59½-1.63½	1.39½-1.39½	1.26½-1.30½	1.15½-1.15½
August 1920....	2.42½-2.45½	2.39½-2.42½	2.35½-2.38½	2.25½-2.28½	2.15½-2.17½	2.05½-2.06	1.95½-1.96
" 1921....	1.76½-1.87½	1.72½-1.80½	1.64½-1.73	1.46½-1.54	1.31½-1.38½	1.17½-1.22½	1.02 -1.05½
September 1920	2.71½-2.82½	2.68½-2.79½	2.64½-2.75½	2.50 -2.61½	2.39½-2.51	- -	- -
" 1921	1.46½-1.59½	1.41½-1.54½	1.37½-1.43½	1.28½-1.36½	1.16½-1.22½	1.04½-1.10½	0.95½-0.99½
October 1920..	2.29½-2.40½	2.27 -2.38½	2.19½-2.30½	2.12 -2.23½	2.02½-2.13	1.92½-1.99	1.82½-1.89½
" 1921..	1.15½-1.23½	1.13½-1.21	1.09½-1.16½	1.03½-1.10½	0.94½-1.01½	0.85 -0.91½	0.75 -0.81½
November 1920	1.98½-2.12½	1.97½-2.11½	1.93½-2.08	1.89 -2.02	1.78½-1.91½	1.67½-1.81½	- -
" 1921	1.08 -1.13	1.05 -1.10½	0.99½-1.04½	0.94½-0.99	0.86½-0.91½	0.78½-0.83½	0.69½-0.74½
December 1920	1.86½-2.00½	1.84 -1.97½	1.78½-1.93	1.60½-1.73½	1.47½-1.58	1.37½-1.44½	1.27 -1.33½
" 1921	1.11½-1.16½	1.05½-1.10½	0.99½-1.04	0.92½-0.96½	0.83½-0.87½	0.75½-0.78½	0.68 -0.71½

### 32.—Weekly Range of Prices of Oats at Winnipeg and Fort William, 1921.

(Per bushel of 34 lb.)

SOURCE: Board of Grain Commissioners for Canada.

Date.	No. 2 C.W.	No. 3 C.W.	No. 1 Fd. Ex.	No. 1 Feed.	No. 2 Feed.
1921.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
January 8.....	0.53 -0.53½	0.50 -0.50½	0.50 -0.50½	0.47½-0.48½	0.44½-0.45½
" 15.....	0.53½-0.55½	0.49½-0.51½	0.49½-0.51½	0.47½-0.49½	0.44½-0.46½
" 22.....	0.48½-0.53	0.44½-0.49	0.44½-0.49	0.42½-0.46½	0.39½-0.43½
" 29.....	0.47½-0.49½	0.43½-0.45½	0.43½-0.45½	0.41½-0.43½	0.38½-0.40½
Average.....	0.50½-0.52½	0.47 -0.49½	0.47 -0.49½	0.44½-0.47½	0.41½-0.44½
February 5.....	0.45½-0.48½	0.41½-0.44½	0.41½-0.44½	0.39½-0.42½	0.36 -0.39
" 12.....	0.47½-0.49½	0.43½-0.45½	0.43½-0.45½	0.41½-0.43½	0.38½-0.40
" 19.....	0.48½-0.51½	0.44½-0.47½	0.44½-0.47½	0.42½-0.45½	0.39½-0.41½
" 26.....	0.49½-0.50½	0.45½-0.46½	0.45½-0.46½	0.43½-0.44½	0.40½-0.41½
Average.....	0.47½-0.50	0.43½-0.45½	0.43½-0.45½	0.41½-0.43½	0.38½-0.40½
March 5.....	0.49½-0.50½	0.45½-0.46½	0.45½-0.46½	0.45½-0.44½	0.40½-0.41½
" 12.....	0.49 -0.50½	0.44½-0.46	0.44½-0.46	0.42½-0.44	0.39½-0.41
" 19.....	0.47½-0.48½	0.42½-0.44½	0.42½-0.44½	0.40½-0.42½	0.37½-0.39½
" 26.....	0.46½-0.47½	0.42 -0.42½	0.42 -0.42½	0.40 -0.40½	0.37 -0.37½
Average.....	0.48½-0.49½	0.43½-0.44½	0.43½-0.44½	0.42½-0.42½	0.38½-0.39½

## 32.—Weekly Range of Prices of Oats at Winnipeg and Fort William, 1921—concluded.

Date.	No. 2 C.W.		No. 3 C.W.		No. 1 Feed Ex		No. 1 Feed.		No. 2 Feed.	
1921.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
April 2.....	0.42	0.47 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.31 $\frac{1}{2}$	0.37 $\frac{1}{2}$
" 9.....	0.43 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.32 $\frac{1}{2}$	0.35 $\frac{1}{2}$
" 16.....	0.43 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.36 $\frac{1}{2}$
" 23.....	0.43 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.37 $\frac{1}{2}$
" 30.....	0.41	0.43 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.32 $\frac{1}{2}$	0.35 $\frac{1}{2}$
Average.....	0.42 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.33 $\frac{1}{2}$	0.36 $\frac{1}{2}$
May 7.....	0.41 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.33 $\frac{1}{2}$	0.34 $\frac{1}{2}$
" 14.....	0.43	0.45 $\frac{1}{2}$	0.39	0.41 $\frac{1}{2}$	0.39	0.41 $\frac{1}{2}$	0.37	0.39 $\frac{1}{2}$	0.35	0.37 $\frac{1}{2}$
" 21.....	0.43 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.39 $\frac{1}{2}$
" 28.....	0.46 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.40 $\frac{1}{2}$
Average.....	0.43 $\frac{1}{2}$	0.46	0.39 $\frac{1}{2}$	0.42	0.39 $\frac{1}{2}$	0.42	0.37 $\frac{1}{2}$	0.40	0.35 $\frac{1}{2}$	0.38 $\frac{1}{2}$
June 4.....	0.47 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$
" 11.....	0.46 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.41	0.44 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.44	0.39 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.39	0.41 $\frac{1}{2}$
" 18.....	0.46 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.41	0.43 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.40 $\frac{1}{2}$
" 25.....	0.47 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.43	0.45 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.43
" 30.....	0.47 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.43
Average.....	0.47 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.43	0.44 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42
July 9.....	0.45 $\frac{1}{2}$	0.49	0.42 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.44	0.39 $\frac{1}{2}$	0.43 $\frac{1}{2}$
" 16.....	0.48 $\frac{1}{2}$	0.53	0.46	0.50 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.50	0.43 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.48
" 23.....	0.52 $\frac{1}{2}$	0.53 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.50 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.50 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.48 $\frac{1}{2}$
" 30.....	0.50 $\frac{1}{2}$	0.54 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.51 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.51 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.45	0.47 $\frac{1}{2}$
Average.....	0.49 $\frac{1}{2}$	0.52 $\frac{1}{2}$	0.47	0.49 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.46 $\frac{1}{2}$
August 6.....	0.48 $\frac{1}{2}$	0.51 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.50 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.48 $\frac{1}{2}$
" 13.....	0.49	0.50 $\frac{1}{2}$	0.48	0.49 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.47	0.48 $\frac{1}{2}$	0.45	0.47 $\frac{1}{2}$
" 20.....	0.46 $\frac{1}{2}$	0.50 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.46 $\frac{1}{2}$
" 27.....	0.47 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.46	0.46 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.46 $\frac{1}{2}$
Average.....	0.47 $\frac{1}{2}$	0.50	0.47	0.49	0.47	0.49	0.46	0.48 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.46 $\frac{1}{2}$
September 3.....	0.47 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.45 $\frac{1}{2}$
" 10.....	0.46 $\frac{1}{2}$	0.49 $\frac{1}{2}$	0.44	0.46 $\frac{1}{2}$	0.44	0.46 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$
" 17.....	0.46 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.42	0.44 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$
" 24.....	0.46 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.41 $\frac{1}{2}$
Average.....	0.46 $\frac{1}{2}$	0.48 $\frac{1}{2}$	0.44	0.46	0.44	0.46	0.42 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.43
October 1.....	0.44 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.40 $\frac{1}{2}$
" 8.....	0.41 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.38 $\frac{1}{2}$
" 15.....	0.41	0.42 $\frac{1}{2}$	0.38	0.39 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.33	0.35 $\frac{1}{2}$
" 22.....	0.39 $\frac{1}{2}$	0.41	0.36 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.31	0.33 $\frac{1}{2}$
" 29.....	0.39 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.31	0.34 $\frac{1}{2}$
Average.....	0.41 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39	0.34 $\frac{1}{2}$	0.36 $\frac{1}{2}$
November 5.....	0.38 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.33 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.31 $\frac{1}{2}$	0.32 $\frac{1}{2}$
" 12.....	0.41 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.34	0.37 $\frac{1}{2}$
" 19.....	0.42 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.40 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.38 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.39 $\frac{1}{2}$
" 26.....	0.44 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$
Average.....	0.41 $\frac{1}{2}$	0.43 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.37 $\frac{1}{2}$
December 3.....	0.44 $\frac{1}{2}$	0.47 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.45 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.36 $\frac{1}{2}$	0.40 $\frac{1}{2}$
" 10.....	0.42 $\frac{1}{2}$	0.46 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.40 $\frac{1}{2}$
" 17.....	0.40 $\frac{1}{2}$	0.42 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.35 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.32 $\frac{1}{2}$	0.34 $\frac{1}{2}$
" 24.....	0.42	0.42 $\frac{1}{2}$	0.39	0.39 $\frac{1}{2}$	0.39	0.39 $\frac{1}{2}$	0.37	0.37 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.35 $\frac{1}{2}$
" 31.....	0.41 $\frac{1}{2}$	0.43	0.38 $\frac{1}{2}$	0.40	0.38 $\frac{1}{2}$	0.40	0.36 $\frac{1}{2}$	0.38	0.34 $\frac{1}{2}$	0.35 $\frac{1}{2}$
Average.....	0.42 $\frac{1}{2}$	0.44 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.41 $\frac{1}{2}$	0.37 $\frac{1}{2}$	0.39 $\frac{1}{2}$	0.34 $\frac{1}{2}$	0.37 $\frac{1}{2}$

## 33.—Weekly Range of Prices of Barley and Flax at Winnipeg and Fort William, 1921.

Date.	BARLEY (per bushel of 48 lb.)				FLAX (per bushel of 56 lb.)				
	No. 3 C.W.		No. 4 C.W.		Rejected.	Feed.	No.1 N.W.C.	No. 2 C.W.	No. 3 C.W.
1921.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
January 8.....	0.88½-0.93½	0.76½-0.84	0.67½-0.71½	0.67½-0.71½	2.00-2.09½	1.96-2.05½	1.73-1.77½		
" 15.....	0.94½-0.99½	0.78½-0.85½	0.67½-0.75½	0.67½-0.75½	2.04-2.09½	2.00-2.05½	1.76½-1.82½		
" 22.....	0.86½-0.94½	0.70½-0.78½	0.59½-0.67½	0.59½-0.67½	1.91½-2.06	1.87½-2.02	1.64-1.78½		
" 29.....	0.82½-0.87	0.67½-0.72½	0.56½-0.61½	0.56½-0.61½	1.80½-1.96½	1.76½-1.92½	1.52-1.68½		
Average.....	0.88-0.93½	0.73½-0.80½	0.62½-0.69½	0.62½-0.69½	1.94-2.05½	1.90-2.01½	1.66½-1.76½		
February 5.....	0.77-0.80½	0.63½-0.66½	0.52½-0.55½	0.52½-0.55½	1.68½-1.76½	1.64½-1.72½	1.40-1.48½		
" 12.....	0.81-0.85½	0.67-0.70½	0.56½-0.60½	0.56½-0.60½	1.75½-1.88½	1.71½-1.84½	1.46½-1.59½		
" 19.....	0.83½-0.87	0.68½-0.72	0.58½-0.62	0.58½-0.62	1.84½-1.89	1.80½-1.85	1.56-1.60		
" 26.....	0.78½-0.85½	0.68-0.70½	0.57½-0.60½	0.57½-0.60½	1.79-1.86½	1.75-1.82½	1.52-1.59½		
Average.....	0.80-0.84	0.66½-0.70	0.56½-0.59½	0.56½-0.59½	1.76½-1.85	1.72½-1.81	1.48½-1.56½		
March 5.....	0.78½-0.86½	0.68½-0.73	0.57½-0.62½	0.57½-0.62½	1.78½-1.84	1.74½-1.80	1.51-1.56		
" 12.....	0.84½-0.85½	0.72½-0.74	0.61½-0.63	0.61-0.62½	1.79½-1.83½	1.74½-1.79½	1.50½-1.55½		
" 19.....	0.81-0.84	0.69½-0.72½	0.58-0.60½	0.57½-0.60½	1.71½-1.74	1.67-1.70½	1.42-1.45½		
" 26.....	0.81-0.84	0.70-0.72½	0.58-0.60½	0.57½-0.60½	1.68½-1.71	1.64½-1.67½	1.39-1.42		
Average.....	0.81½-0.85	0.70½-0.73	0.58½-0.61½	0.58½-0.61½	1.74½-1.78½	1.70½-1.74½	1.45½-1.49½		
April 2.....	0.75-0.84½	0.63½-0.72½	0.51½-0.60½	0.51½-0.60½	1.49-1.72	1.45-1.68	1.19-1.42½		
" 9.....	0.72½-0.75	0.62½-0.64	0.50½-0.52	0.50½-0.52	1.48½-1.53	1.44½-1.49	1.18½-1.22½		
" 16.....	0.73½-0.76½	0.62½-0.64½	0.49½-0.52½	0.49½-0.51½	1.38½-1.50½	1.34-1.45½	1.07-1.19		
" 23.....	0.75-0.78	0.63½-0.67½	0.51-0.54½	0.50½-0.54	1.47-1.63	1.42½-1.58½	1.15½-1.31½		
" 30.....	0.74½-0.77	0.66½-0.67½	0.53½-0.57½	0.53-0.56½	1.47½-1.55½	1.43½-1.45½	1.16½-1.23½		
Average.....	0.74½-0.78½	0.63½-0.67½	0.51½-0.55½	0.51-0.55	1.46½-1.58½	1.42-1.53½	1.15½-1.27½		
May 7.....	0.73½-0.77½	0.68½-0.72	0.55-0.59	0.54-0.58½	1.57½-1.62	1.53½-1.58	1.25½-1.30		
" 14.....	0.74½-0.78½	0.69½-0.73	0.57-0.61½	0.56-0.60½	1.60½-1.70½	1.56½-1.66½	1.28½-1.38½		
" 21.....	0.77-0.80½	0.72-0.76½	0.60½-0.63½	0.59½-0.62½	1.66-1.79½	1.62-1.75½	1.34-1.47½		
" 28.....	0.75½-0.79½	0.70½-0.74½	0.61-0.64½	0.60-0.64½	1.72-1.80½	1.68-1.76½	1.40-1.48½		
Average.....	0.75½-0.79	0.71½-0.74	0.58½-0.62½	0.57½-0.61½	1.64½-1.73½	1.60-1.69½	1.32-1.41½		
June 4.....	0.78-0.82	0.73-0.78½	0.65½-0.70½	0.65½-0.70½	1.75½-1.83½	1.71½-1.79½	1.43½-1.58½		
" 11.....	0.80-0.81½	0.77½-0.78½	0.69½-0.70½	0.69½-0.70½	1.77-1.85½	1.72½-1.81½	1.46½-1.56½		
" 18.....	0.78½-0.81	0.75½-0.76½	0.68½-0.70½	0.68½-0.70½	1.80½-1.85½	1.76½-1.81½	1.51-1.53½		
" 25.....	0.78-0.79½	0.74-0.75½	0.69-0.70½	0.69-0.70½	1.80-1.82½	1.76½-1.78½	1.50½-1.53		
" 30.....	0.75-0.78½	0.70½-0.73½	0.65-0.69½	0.64-0.69½	1.75-1.82½	1.71-1.79	1.45½-1.53½		
Average.....	0.77½-0.80½	0.74-0.76½	0.67½-0.70½	0.67½-0.70½	1.77½-1.84	1.73½-1.80	1.47½-1.55		
July 9.....	0.74½-0.80½	0.70-0.76	0.64½-0.70	0.63½-0.69	1.77½-1.80	1.73½-1.76	1.47½-1.50		
" 16.....	0.79½-0.83	0.75½-0.79	0.69½-0.74	0.68½-0.73	1.78½-1.90	1.74½-1.86	1.48½-1.60		
" 23.....	0.82-0.84½	0.78½-0.81½	0.73-0.75½	0.72-0.74½	1.93-2.01½	1.89-1.97½	1.63-1.71½		
" 30.....	0.76½-0.82	0.72½-0.77½	0.68½-0.73	0.67½-0.72	1.97½-2.01½	1.93½-1.97½	1.67½-1.71½		
Average.....	0.78½-0.82½	0.74-0.78½	0.68½-0.73½	0.68-0.72½	1.86½-1.93½	1.82½-1.89½	1.56½-1.63½		
August 6.....	0.76½-0.78½	0.72½-0.74½	0.68½-0.70½	0.67½-0.69½	1.94½-1.99½	1.90½-1.95½	1.64½-1.69½		
" 13.....	0.78½-0.82	0.73½-0.78½	0.69½-0.73	0.68½-0.72	1.95½-2.06½	1.92½-2.03½	1.65½-1.73½		
" 20.....	0.75½-0.82½	0.73½-0.79½	0.69½-0.74½	0.68½-0.74	1.98-2.08	1.94½-2.04½	1.66-1.76½		
" 27.....	0.74½-0.75½	0.72½-0.73½	0.68½-0.70½	0.68½-0.70½	1.96½-2.03½	1.93-2.00	1.68-1.72½		
Average.....	0.76½-0.79½	0.72½-0.76½	0.68½-0.72½	0.68½-0.71½	1.96-2.04½	1.92½-2.01	1.66-1.73½		
September 3....	0.74½-0.78½	0.72-0.76½	0.66-0.70½	0.56-0.70½	1.90½-1.97	1.87-1.93½	1.62-1.69		
" 10.....	0.72½-0.75½	0.69-0.71½	0.63½-0.65½	0.63½-0.65½	1.93-2.04½	1.89½-2.00½	1.65-1.76½		
" 17.....	0.67-0.73	0.64-0.69½	0.52½-0.62	0.52½-0.62	2.04½-2.10	2.00½-2.06	1.75-1.81½		
" 24.....	0.67-0.68½	0.63-0.65½	0.52½-0.54	0.52½-0.54	1.97½-2.07½	1.93½-2.03½	1.68½-1.78		
Average.....	0.70½-0.74	0.67-0.70½	0.58½-0.63	0.56-0.63	1.96½-2.04½	1.92½-2.00½	1.57½-1.76½		
October 1.....	0.58½-0.64½	0.54-0.60½	0.45-0.50½	0.45-0.50	1.94-2.00½	1.90-1.96½	1.64-1.71		
" 8.....	0.54-0.56½	0.49½-0.52	0.41-0.43½	0.41-0.43½	1.72-1.90	1.68-1.86	1.42-1.60		
" 15.....	0.56-0.57½	0.51½-0.52½	0.43½-0.44½	0.43½-0.44½	1.78-1.86½	1.74-1.82½	1.48-1.56½		
" 22.....	0.54-0.57	0.49½-0.52½	0.41-0.45	0.41-0.45	1.73-1.76½	1.69-1.72½	1.43-1.46½		
" 29.....	0.57½-0.60	0.52½-0.55	0.45½-0.48½	0.45½-0.48½	1.75½-1.81½	1.71½-1.77½	1.45½-1.51½		
Average.....	0.56-0.59½	0.51½-0.54½	0.43½-0.46½	0.43½-0.46½	1.78½-1.87	1.74½-1.83	1.48½-1.57½		
November 5....	0.54-0.58½	0.49½-0.53½	0.44-0.48½	0.44-0.48½	1.67-1.77½	1.63-1.73½	1.37-1.47½		
" 12.....	0.57-0.58	0.52½-0.53½	0.47-0.48	0.47-0.48	1.74½-1.76	1.70½-1.72	1.44½-1.46		
" 19.....	0.56-0.57	0.52-0.54	0.46-0.47½	0.46-0.47½	1.70-1.75	1.66½-1.71	1.40½-1.45		
" 26.....	0.56-0.58	0.51½-0.54½	0.42½-0.48	0.42½-0.48	1.73½-1.78½	1.69½-1.74½	1.43½-1.48½		
Average.....	0.55½-0.58	0.51½-0.54	0.44½-0.48	0.44½-0.48	1.71½-1.76½	1.67½-1.72½	1.41½-1.46½		
December 3....	0.56½-0.57½	0.52½-0.53½	0.43½-0.45½	0.43½-0.45½	1.67-1.73	1.63-1.69	1.37-1.43		
" 10.....	0.55-0.57½	0.50½-0.53	0.39½-0.45	0.39½-0.45	1.64½-1.69	1.60-1.65	1.34-1.39		
" 17.....	0.52-0.54	0.47-0.49	0.36-0.39	0.36-0.39	1.69-1.75	1.65-1.71	1.39-1.45		
" 24.....	0.53-0.56½	0.48-0.51½	0.38-0.41½	0.38-0.41	1.72½-1.79½	1.68½-1.75½	1.42½-1.49		
" 31.....	0.54-0.55½	0.49-0.50½	0.40-0.40½	0.40-0.40½	1.77½-1.79½	1.73½-1.75½	1.47½-1.49		
Average.....	0.54½-0.56½	0.49½-0.51½	0.39½-0.42½	0.39½-0.42½	1.70-1.75½	1.66-1.71½	1.40-1.45½		



## 34.—Monthly Range of Average Prices of Barley, Oats and Flax at Winnipeg and Fort William, 1920-1921.

Date.	BARLEY (per bushel of 48 lb.)		OATS (per bushel of 34 lb.)					FLAX (per bushel of 56 lb.)								
	No. 3 C.W.		No. 2 C.W.	No. 3 C.W.	No. 1 Feed	No. 2 Feed	No. 1 N.C.W.	No. 2 C.W.	No. 3 C.W.							
	\$ c.	\$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.							
Averages for—																
Jan. 1920.	1.72	-1.75 <sup>3</sup> / <sub>4</sub>	0.72	-0.94 <sup>3</sup> / <sub>4</sub>	0.88	-0.91 <sup>3</sup> / <sub>4</sub>	0.86	-0.89	0.83	-0.85 <sup>3</sup> / <sub>4</sub>	4.87	-4.85 <sup>3</sup> / <sub>4</sub>	4.77	-4.89 <sup>3</sup> / <sub>4</sub>	4.45	-4.57 <sup>3</sup> / <sub>4</sub>
1921.	0.88	-0.93 <sup>3</sup> / <sub>4</sub>	0.50	-0.52 <sup>3</sup> / <sub>4</sub>	0.47	-0.49 <sup>3</sup> / <sub>4</sub>	0.44	-0.47 <sup>3</sup> / <sub>4</sub>	0.41	-0.44 <sup>3</sup> / <sub>4</sub>	1.94	-2.05 <sup>3</sup> / <sub>4</sub>	1.90	-2.01 <sup>3</sup> / <sub>4</sub>	1.66	-1.76 <sup>3</sup> / <sub>4</sub>
Feb. 1920.	1.67	-1.76 <sup>3</sup> / <sub>4</sub>	0.93	-0.96 <sup>3</sup> / <sub>4</sub>	0.89	-0.93 <sup>3</sup> / <sub>4</sub>	0.87	-0.91 <sup>3</sup> / <sub>4</sub>	0.85	-0.89 <sup>3</sup> / <sub>4</sub>	5.07	-5.26 <sup>3</sup> / <sub>4</sub>	4.80	-4.99 <sup>3</sup> / <sub>4</sub>	4.46	-4.65 <sup>3</sup> / <sub>4</sub>
1921.	0.80	-0.84 <sup>3</sup> / <sub>4</sub>	0.47	-0.50 <sup>3</sup> / <sub>4</sub>	0.43	-0.45 <sup>3</sup> / <sub>4</sub>	0.41	-0.43 <sup>3</sup> / <sub>4</sub>	0.38	-0.40 <sup>3</sup> / <sub>4</sub>	1.76	-1.85 <sup>3</sup> / <sub>4</sub>	1.72	-1.81 <sup>3</sup> / <sub>4</sub>	1.48	-1.56 <sup>3</sup> / <sub>4</sub>
Mar. 1920.	1.68	-1.73 <sup>3</sup> / <sub>4</sub>	0.97	-0.99 <sup>3</sup> / <sub>4</sub>	0.94	-0.96 <sup>3</sup> / <sub>4</sub>	0.94	-0.95 <sup>3</sup> / <sub>4</sub>	0.92	-0.94 <sup>3</sup> / <sub>4</sub>	5.27	-5.53 <sup>3</sup> / <sub>4</sub>	5.17	-5.44 <sup>3</sup> / <sub>4</sub>	4.76	-5.04 <sup>3</sup> / <sub>4</sub>
1921.	0.81	-0.85 <sup>3</sup> / <sub>4</sub>	0.48	-0.49 <sup>3</sup> / <sub>4</sub>	0.43	-0.44 <sup>3</sup> / <sub>4</sub>	0.42	-0.42 <sup>3</sup> / <sub>4</sub>	0.38	-0.39 <sup>3</sup> / <sub>4</sub>	1.74	-1.78 <sup>3</sup> / <sub>4</sub>	1.70	-1.74 <sup>3</sup> / <sub>4</sub>	1.45	-1.49 <sup>3</sup> / <sub>4</sub>
April 1920.	1.67	-1.73 <sup>3</sup> / <sub>4</sub>	0.97	-1.00 <sup>3</sup> / <sub>4</sub>	0.94	-0.97 <sup>3</sup> / <sub>4</sub>	0.93	-0.96 <sup>3</sup> / <sub>4</sub>	0.92	-0.94 <sup>3</sup> / <sub>4</sub>	5.26	-5.49 <sup>3</sup> / <sub>4</sub>	5.18	-5.40 <sup>3</sup> / <sub>4</sub>	4.70	-5.00 <sup>3</sup> / <sub>4</sub>
1921.	0.74	-0.78 <sup>3</sup> / <sub>4</sub>	0.42	-0.45 <sup>3</sup> / <sub>4</sub>	0.37	-0.40 <sup>3</sup> / <sub>4</sub>	0.35	-0.38 <sup>3</sup> / <sub>4</sub>	0.33	-0.36 <sup>3</sup> / <sub>4</sub>	1.46	-1.58 <sup>3</sup> / <sub>4</sub>	1.42	-1.53 <sup>3</sup> / <sub>4</sub>	1.15	-1.27 <sup>3</sup> / <sub>4</sub>
May 1920.	1.78	-1.82 <sup>3</sup> / <sub>4</sub>	1.16	-1.20 <sup>3</sup> / <sub>4</sub>	1.15	-1.17 <sup>3</sup> / <sub>4</sub>	1.12	-1.15 <sup>3</sup> / <sub>4</sub>	1.10	-1.13 <sup>3</sup> / <sub>4</sub>	4.84	-5.05 <sup>3</sup> / <sub>4</sub>	4.82	-5.01 <sup>3</sup> / <sub>4</sub>	4.17	-4.35 <sup>3</sup> / <sub>4</sub>
1921.	0.75	-0.79 <sup>3</sup> / <sub>4</sub>	0.43	-0.46 <sup>3</sup> / <sub>4</sub>	0.39	-0.42 <sup>3</sup> / <sub>4</sub>	0.37	-0.40 <sup>3</sup> / <sub>4</sub>	0.35	-0.38 <sup>3</sup> / <sub>4</sub>	1.64	-1.73 <sup>3</sup> / <sub>4</sub>	1.60	-1.69 <sup>3</sup> / <sub>4</sub>	1.32	-1.41 <sup>3</sup> / <sub>4</sub>
June 1920.	1.90	-1.93 <sup>3</sup> / <sub>4</sub>	1.25	-1.33 <sup>3</sup> / <sub>4</sub>	1.25	-1.33 <sup>3</sup> / <sub>4</sub>	1.24	-1.32 <sup>3</sup> / <sub>4</sub>	1.21	-1.32 <sup>3</sup> / <sub>4</sub>	4.23	-4.39 <sup>3</sup> / <sub>4</sub>	4.19	-4.35 <sup>3</sup> / <sub>4</sub>	3.69	-3.84 <sup>3</sup> / <sub>4</sub>
1921.	0.77	-0.80 <sup>3</sup> / <sub>4</sub>	0.47	-0.49 <sup>3</sup> / <sub>4</sub>	0.43	-0.44 <sup>3</sup> / <sub>4</sub>	0.40	-0.42 <sup>3</sup> / <sub>4</sub>	0.40	-0.42 <sup>3</sup> / <sub>4</sub>	1.77	-1.84 <sup>3</sup> / <sub>4</sub>	1.73	-1.80 <sup>3</sup> / <sub>4</sub>	1.47	-1.55 <sup>3</sup> / <sub>4</sub>
July 1920.	1.63	-1.74 <sup>3</sup> / <sub>4</sub>	1.12	-1.22 <sup>3</sup> / <sub>4</sub>	1.10	-1.20 <sup>3</sup> / <sub>4</sub>	1.09	-1.18 <sup>3</sup> / <sub>4</sub>	1.10	-1.13 <sup>3</sup> / <sub>4</sub>	3.63	-3.82 <sup>3</sup> / <sub>4</sub>	3.59	-3.78 <sup>3</sup> / <sub>4</sub>	3.09	-3.29 <sup>3</sup> / <sub>4</sub>
1921.	0.78	-0.82 <sup>3</sup> / <sub>4</sub>	0.49	-0.52 <sup>3</sup> / <sub>4</sub>	0.47	-0.49 <sup>3</sup> / <sub>4</sub>	0.44	-0.47 <sup>3</sup> / <sub>4</sub>	0.43	-0.46 <sup>3</sup> / <sub>4</sub>	1.80	-1.93 <sup>3</sup> / <sub>4</sub>	1.82	-1.89 <sup>3</sup> / <sub>4</sub>	1.56	-1.62 <sup>3</sup> / <sub>4</sub>
Aug. 1920.	1.37	-1.43 <sup>3</sup> / <sub>4</sub>	0.91	-0.98 <sup>3</sup> / <sub>4</sub>	0.93	-0.96 <sup>3</sup> / <sub>4</sub>	0.92	-0.91 <sup>3</sup> / <sub>4</sub>	0.85	-0.88 <sup>3</sup> / <sub>4</sub>	4.70	-5.53 <sup>3</sup> / <sub>4</sub>	4.39	-3.47 <sup>3</sup> / <sub>4</sub>	2.96	-3.05 <sup>3</sup> / <sub>4</sub>
1921.	0.76	-0.79 <sup>3</sup> / <sub>4</sub>	0.47	-0.50 <sup>3</sup> / <sub>4</sub>	0.47	-0.49 <sup>3</sup> / <sub>4</sub>	0.46	-0.48 <sup>3</sup> / <sub>4</sub>	0.44	-0.46 <sup>3</sup> / <sub>4</sub>	1.96	-2.04 <sup>3</sup> / <sub>4</sub>	1.92	-2.01 <sup>3</sup> / <sub>4</sub>	1.66	-1.73 <sup>3</sup> / <sub>4</sub>
Sept. 1920.	1.20	-1.26 <sup>3</sup> / <sub>4</sub>	0.85	-0.86 <sup>3</sup> / <sub>4</sub>	0.77	-0.85 <sup>3</sup> / <sub>4</sub>	0.76	-0.83 <sup>3</sup> / <sub>4</sub>	0.67	-0.82 <sup>3</sup> / <sub>4</sub>	3.39	-3.52 <sup>3</sup> / <sub>4</sub>	3.33	-3.45 <sup>3</sup> / <sub>4</sub>	3.03	-3.17 <sup>3</sup> / <sub>4</sub>
1921.	0.70	-0.74 <sup>3</sup> / <sub>4</sub>	0.46	-0.48 <sup>3</sup> / <sub>4</sub>	0.44	-0.46 <sup>3</sup> / <sub>4</sub>	0.42	-0.44 <sup>3</sup> / <sub>4</sub>	0.40	-0.43 <sup>3</sup> / <sub>4</sub>	1.96	-2.04 <sup>3</sup> / <sub>4</sub>	1.92	-2.00 <sup>3</sup> / <sub>4</sub>	1.67	-1.76 <sup>3</sup> / <sub>4</sub>
Oct. 1920.	1.11	-1.17 <sup>3</sup> / <sub>4</sub>	0.70	-0.74 <sup>3</sup> / <sub>4</sub>	0.66	-0.68 <sup>3</sup> / <sub>4</sub>	0.63	-0.67 <sup>3</sup> / <sub>4</sub>	0.61	-0.64 <sup>3</sup> / <sub>4</sub>	2.92	-3.06 <sup>3</sup> / <sub>4</sub>	2.88	-3.02 <sup>3</sup> / <sub>4</sub>	2.52	-2.65 <sup>3</sup> / <sub>4</sub>
1921.	0.56	-0.59 <sup>3</sup> / <sub>4</sub>	0.41	-0.43 <sup>3</sup> / <sub>4</sub>	0.38	-0.40 <sup>3</sup> / <sub>4</sub>	0.36	-0.39 <sup>3</sup> / <sub>4</sub>	0.34	-0.36 <sup>3</sup> / <sub>4</sub>	1.78	-1.87 <sup>3</sup> / <sub>4</sub>	1.74	-1.83 <sup>3</sup> / <sub>4</sub>	1.48	-1.57 <sup>3</sup> / <sub>4</sub>
Nov. 1920.	0.98	-1.11 <sup>3</sup> / <sub>4</sub>	0.59	-0.64 <sup>3</sup> / <sub>4</sub>	0.54	-0.59 <sup>3</sup> / <sub>4</sub>	0.51	-0.55 <sup>3</sup> / <sub>4</sub>	0.48	-0.52 <sup>3</sup> / <sub>4</sub>	2.19	-2.42 <sup>3</sup> / <sub>4</sub>	2.15	-2.38 <sup>3</sup> / <sub>4</sub>	1.82	-2.04 <sup>3</sup> / <sub>4</sub>
1921.	0.55	-0.58 <sup>3</sup> / <sub>4</sub>	0.41	-0.43 <sup>3</sup> / <sub>4</sub>	0.39	-0.41 <sup>3</sup> / <sub>4</sub>	0.37	-0.39 <sup>3</sup> / <sub>4</sub>	0.34	-0.37 <sup>3</sup> / <sub>4</sub>	1.17	-1.76 <sup>3</sup> / <sub>4</sub>	1.67	-1.72 <sup>3</sup> / <sub>4</sub>	1.41	-1.46 <sup>3</sup> / <sub>4</sub>
Dec. 1920.	0.91	-1.01 <sup>3</sup> / <sub>4</sub>	0.52	-0.56 <sup>3</sup> / <sub>4</sub>	0.49	-0.52 <sup>3</sup> / <sub>4</sub>	0.46	-0.49 <sup>3</sup> / <sub>4</sub>	0.43	-0.46 <sup>3</sup> / <sub>4</sub>	1.96	-2.07 <sup>3</sup> / <sub>4</sub>	1.92	-2.02 <sup>3</sup> / <sub>4</sub>	1.61	-1.72 <sup>3</sup> / <sub>4</sub>
1921.	0.51	-0.56 <sup>3</sup> / <sub>4</sub>	0.42	-0.44 <sup>3</sup> / <sub>4</sub>	0.39	-0.41 <sup>3</sup> / <sub>4</sub>	0.37	-0.39 <sup>3</sup> / <sub>4</sub>	0.34	-0.37 <sup>3</sup> / <sub>4</sub>	1.70	-1.75 <sup>3</sup> / <sub>4</sub>	1.66	-1.71 <sup>3</sup> / <sub>4</sub>	1.40	-1.45 <sup>3</sup> / <sub>4</sub>

## 35.—Monthly Range of Average Prices in British Markets of Canadian Wheat and Oats, 1920-1921.

Date.	WHEAT (per bushel of 60 lb.)				OATS (per bushel of 34 lb.)
	No. 1. \$ c. \$ c.	No. 2. \$ c. \$ c.	No. 3. \$ c. \$ c.	No. 4. \$ c. \$ c.	
Average for—					\$ c. \$ c.
January 1920.....	2.29½	—	2.62½	—	1.62½-1.65½
January 1921.....	3.08½-3.11½	3.00½-3.03	2.86½-2.90½	2.95½-3.06	1.13-1.17½
February 1920.....	2.29½	—	2.61½	—	1.68½-1.71½
February 1921.....	2.81½-2.84	2.75½-2.78½	2.67½-2.70½	2.60½-2.63½	1.02½-1.10½
March 1920.....	2.48½	—	2.40½	—	1.61½-1.64
March 1921.....	2.79½-2.82½	2.75½-2.78½	2.67½-2.70½	2.62-2.65	—
April 1920.....	2.78½	—	2.76	—	1.39-1.44½
April 1921.....	2.71½-2.74½	2.68½-2.71½	2.61½-2.64½	2.56-2.59	—
May 1920.....	2.79½	—	2.76½	—	1.48½-1.53½
May 1921.....	2.75-2.77½	2.72-2.75	2.66-2.69	2.61½-2.65	—
June 1920.....	2.79½	—	2.76½	—	1.62½-1.65½
June 1921.....	2.69½-2.72½	2.66½-2.69	2.62-2.64½	2.50½-2.53½	—
July 1920.....	2.79½	—	2.76½	—	1.62½-1.65½
July 1921.....	2.61½-2.64½	2.58½-2.60½	2.53½-2.55½	2.39-2.41½	0.80½-0.86
August 1920.....	2.83½	—	2.80½	—	1.62½-1.65½
August 1921.....	2.70½-2.73½	2.67½-2.70½	2.60½-2.63½	2.57½-2.60½	0.92½-0.98½
September 1920.....	2.85½	—	2.82½	—	1.62½-1.65½
September 1921.....	2.77½-2.80½	2.82½	2.76½	2.73½	0.97½-1.00½
October 1920.....	3.10½-3.62	3.05½-3.53½	2.97½-3.44½	2.94½-3.38½	1.61½-1.63½
October 1921.....	2.00½-2.06½	1.91½-1.96½	1.76½-1.77½	1.70-1.73	0.78½-0.81
November 1920.....	3.60½-3.62	3.51½-3.53½	3.40-3.44	3.37-3.38½	1.55½-1.58½
November 1921.....	1.61-1.64½	1.58½-1.61	1.51½-1.54½	1.48½-1.51½	0.92-0.94
December 1920.....	3.34½-3.36½	3.26-3.38½	3.14½-3.17½	3.13-3.13½	1.21½-1.29½
December 1921.....	1.65½-1.68½	1.62½-1.65½	1.56½-1.57½	1.53½-1.56½	0.90-0.93½



### 36.—Yearly Average Prices of Home Grown Wheat, Barley and Oats in England and Wales, 1902-1921.

SOURCE: "London Gazette," published pursuant to Sec. 8 of the Corn Returns Act. 1882.

Year.	Wheat.		Barley.		Oats.		Year.	Wheat.		Barley.		Oats.	
	per	per	per	per	per	per		per	per	per	per	per	per
	qr.	bush.	qr.	bush.	qr.	bush.		qr.	bush.	qr.	bush.	qr.	bush.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.		s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
1902.....	28. 1	0.85	25. 8	0.78	20. 2	0.61	1912.....	34. 9	1.06	30. 8	0.93	21. 6	0.65
1903.....	26. 9	0.81	22. 8	0.69	17. 2	0.52	1913.....	31. 8	0.96	27. 3	0.83	19. 1	0.58
1904.....	28. 4	0.86	22. 4	0.68	16. 4	0.50	1914.....	34. 11	1.06	27. 2	0.83	20. 11	0.64
1905.....	29. 8	0.60	24. 4	0.74	17. 4	0.53	1915.....	52. 10	1.61	37. 4	1.13	30. 2	0.92
1906.....	28. 3	0.86	24. 2	0.73	18. 4	0.56	1916.....	58. 5	1.78	53. 6	1.56	33. 5	0.89
1907.....	20. 7	0.93	25. 1	0.76	18. 10	0.57	1917.....	75. 9	2.30	64. 9	1.89	49. 10	1.32
1908.....	32. 0	0.97	25. 10	0.79	17. 10	0.54	1918.....	72. 10	2.22	59. 0	1.72	49. 4	1.31
1909.....	36. 11	0.82	26. 10	0.82	18. 11	0.58	1919.....	72. 11	2.22	75. 9	2.21	52. 5	1.39
1910.....	31. 8	0.96	23. 1	0.70	17. 4	0.53	1920.....	80. 10	2.46	89. 5	2.60	56. 10	1.51
1911.....	31. 8	0.96	27. 3	0.83	18. 10	0.57	1921.....	71. 6	2.17	52. 2	1.52	34. 2	0.90

### 37.—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1921.

(SOURCE: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations; for Winnipeg and U.S. Cities "The Northwestern Miller," Minneapolis)

Month.	Montreal.				Toronto.			
	Flour Manitoba Standard grade.	Flour Ontario del'd at Montreal.	Bran.	Shorts.	First Patents Flour (Jute bags).	First Patents Flour (Cotton bags).	Bran.	Shorts.
1921.	Per brl. \$ cts.	Per brl. \$ cts.	Per ton \$ cts.	Per ton \$ cts.	Per brl. \$ cts.	Per brl. \$ cts.	Per ton \$ cts.	Per ton \$ cts.
January.....	10.94	8.55 <sup>1</sup>	40.25	42.25	10.90	11.90	40.25	40.25
February.....	10.70	8.37 <sup>1</sup>	39.25	37.87	10.70	10.90	38.25	40.25
March.....	10.50	8.50 <sup>1</sup>	37.25	36.50	10.50	10.70	36.25	36.25
April.....	10.16	7.37 <sup>1</sup>	33.05	34.65	10.00	10.20	31.25	33.25
May.....	10.50	7.00 <sup>1</sup>	29.25	31.25	10.50	10.70	29.25	31.25
June.....	10.50	7.47 <sup>1</sup>	27.47	29.21	10.50	10.70	27.25	29.25
July.....	10.50	7.40 <sup>1</sup>	25.55	27.15	10.50	10.70	25.25	26.25
August.....	10.50	6.60	28.06	29.69	10.50	10.70	28.25	30.25
September.....	10.00	6.08	28.50	30.40	9.50	9.70	27.25	29.25
October.....	8.02	5.46 <sup>1</sup>	22.94	24.94	8.10	8.30	23.25	25.25
November.....	7.42	(2) 54.60 <sup>1</sup>	21.78	23.78	7.40	7.60	22.25	24.25
December.....	7.50	4.90	25.05	27.05	7.50	7.70	26.25	28.25

Month.	Winnipeg.			Minneapolis.			Duluth.	
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.	
1921.	Per brl. \$ cts.	Per ton \$ cts.	Per ton \$ cts.	Per brl. \$ cts.	Per ton \$ cts.	Per ton \$ cts.	Per brl. \$ cts.	
January.....	10.90	35.00	37.00	9.45 — 9.80	26.00 — 26.62	24.25 — 25.00	8.75 — 9.00	
February.....	10.90	35.00	37.00	9.04 — 9.40	20.50 — 21.37	20.87 — 21.75	8.69 — 8.94	
March.....	10.65	31.00	31.40	8.50 — 8.96	21.10 — 21.90	21.70 — 22.20	8.58 — 8.83	
April.....	10.27	26.25	27.75	7.79 — 8.11	16.00 — 16.50	— 15.87	7.62 — 7.87	
May.....	10.22	25.00	27.00	8.76 — 9.02	15.75 — 16.33	— 16.00	8.25 — 8.60	
June.....	10.45	25.00	27.00	8.75 — 9.26	14.12 — 14.75	15.00 — 15.62	8.57 — 8.87	
July.....	10.21	19.40	21.40	8.47 — 9.22	13.70 — 14.05	14.00 — 14.40	9.04 — 9.29	
August.....	10.15	19.00	21.00	7.74 — 8.25	13.62 — 14.00	14.37 — 15.50	8.34 — 8.66	
September.....	9.65	19.00	21.00	8.09 — 8.55	12.69 — 13.25	14.00 — 15.00	7.99 — 8.39	
October.....	7.74	16.60	18.60	7.13 — 7.59	12.10 — 12.60	13.00 — 13.50	7.72 — 7.97	
November.....	7.12	15.40	17.40	7.31 — 7.89	14.40 — 15.20	15.20 — 15.90	7.10 — 7.35	
December.....	7.30	17.80	19.80	7.25 — 7.64	20.37 — 21.12	21.12 — 21.87	7.32 — 7.57	

NOTE.—The ton=2,000 lb. and the barrel=196 lb.

<sup>1</sup> Ontario Flour (Seaboard).

## 38.—Average Prices of Canadian Live Stock at Principal Markets, 1919, 1920 and 1921.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	Toronto.			Montreal.		
	1919.	1920.	1921.	1919.	1920.	1921.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Steers—heavy finished.....	13-98	13-77	7-73	14-00	—	8-92
Steers—1,000-1,200 lb., good.....	13-66	12-89	7-58	12-67	13-08	8-24
Steers—1,000-1,200 lb., common.....	11-18	10-22	6-64	10-86	11-42	5-97
Steers—700-1,000 lb., good.....	12-39	12-27	7-24	11-57	12-34	7-55
Steers—700-1,000 lb., common.....	8-204	8-65	5-24	8-58	8-08	5-85
Heifers, good.....	12-19	12-56	7-66	10-45	11-62	7-19
Heifers, fair.....	9-58	8-82	6-18	8-75	8-81	5-91
Heifers, common.....	7-32	7-67	4-35	7-17	7-10	3-80
Cows, good.....	10-14	10-65	5-86	9-74	9-77	5-88
Cows, common.....	7-74	7-89	4-52	7-44	6-91	4-65
Bulls, good.....	10-13	10-46	5-55	10-27	11-13	6-98
Bulls, common.....	7-53	6-98	3-71	6-44	5-06	3-43
Canners and cutters.....	5-49	4-66	2-49	5-21	4-48	2-28
Oxen.....	8-50	—	—	9-14	10-30	6-27
Calves, veal.....	15-36	16-79	10-24	11-98	12-13	6-94
Calves, grass.....	6-52	8-58	3-04	7-42	6-99	2-92
Stockers—450-800 lb., good.....	9-35	9-02	4-87	—	—	—
Stockers—450-800 lb., fair.....	7-97	8-23	3-15	—	—	—
Feeders—800-1,100 lb., good.....	12-32	11-22	7-01	—	—	—
Feeders—800-1,000 lb., fair.....	10-41	10-78	3-90	—	—	—
Hogs (fed and watered), selects.....	19-59	18-98	11-72	19-96	19-82	12-52
Hogs (fed and watered), heavies.....	19-16	18-87	10-01	20-24	18-97	10-11
Hogs (fed and watered), lights.....	18-43	16-58	9-56	17-28	18-06	12-13
Hogs (fed and watered), sows.....	17-53	15-41	8-17	17-51	16-24	8-31
Hogs (fed and watered), stags.....	14-95	13-27	9-25	15-62	13-83	9-92
Lambs, good.....	14-63	13-86	9-59	13-98	12-79	8-23
Lambs, common.....	12-27	10-04	7-43	12-60	10-58	6-49
Sheep, heavy.....	9-09	8-52	4-64	—	—	—
Sheep, light.....	9-13	8-65	5-25	8-86	10-44	4-56
Sheep, common.....	5-92	5-36	2-91	7-91	7-17	3-37

Classification.	Winnipeg.			Edmonton.		
	1919.	1920.	1921.	1919.	1920.	1921.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Steers—heavy finished.....	11-35	10-12	5-41	10-90	12-28	5-27
Steers—1,000-1,200 lb., good.....	11-15	10-46	5-78	9-95	9-65	5-49
Steers—1,000-1,200 lb., common.....	9-70	6-91	3-89	8-10	5-83	3-85
Steers—700-1,000 lb., good.....	9-80	9-80	5-67	9-45	8-30	4-77
Steers—700-1,000 lb., common.....	7-25	6-24	4-12	7-75	5-83	3-68
Heifers, good.....	9-55	8-36	5-19	9-55	7-68	3-58
Heifers, fair.....	8-18	6-42	4-04	8-75	6-18	—
Heifers, common.....	6-35	5-07	2-92	6-70	5-62	3-47
Cows, good.....	9-83	8-79	4-34	8-25	7-97	2-82
Cows, common.....	7-03	5-91	3-18	7-25	5-71	4-05
Bulls, good.....	7-01	6-31	3-32	6-95	6-14	2-96
Bulls, common.....	6-23	4-91	2-55	5-95	4-22	2-88
Canners and cutters.....	4-87	3-65	2-06	4-91	3-54	2-19
Oxen.....	7-42	6-30	2-87	7-15	8-88	2-04
Calves, veal.....	9-57	8-46	5-47	8-29	8-66	3-00
Calves, grass.....	—	—	—	—	—	3-31
Stockers—450-800 lb., good.....	8-39	6-48	3-52	7-95	7-12	3-46
Stockers—450-800 lb., fair.....	6-60	5-39	2-81	7-45	5-54	2-87
Feeders—800-1,000 lb., good.....	10-05	8-33	4-27	8-15	9-94	3-34
Feeders—800-1,000 lb., fair.....	8-24	6-49	3-61	7-90	—	3-06
Hogs (fed and watered), selects.....	18-37	18-33	12-01	18-25	18-11	10-70
Hogs (fed and watered), heavies.....	15-81	16-56	9-56	16-25	17-26	9-98
Hogs (fed and watered), lights.....	15-55	16-01	11-00	15-85	16-40	7-44
Hogs (fed and watered), sows.....	11-21	11-77	6-07	12-20	15-07	6-06
Hogs (fed and watered), stags.....	15-26	13-94	6-77	15-10	16-11	8-22
Lambs, good.....	12-63	11-11	8-88	12-25	9-98	7-53
Lambs, common.....	7-82	6-65	6-26	11-05	7-61	5-66
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	9-26	7-23	5-21	9-50	7-93	5-26
Sheep, common.....	6-79	4-81	2-98	8-50	7-73	3-54

**39.—Average Monthly Prices of Canadian Live Stock at Principal Markets, 1921.**

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
<b>Montreal—</b>												
Steers, 1,000-1,200 lb. good.....	10-22	9-42	10-42	10-37	9-34	8-63	7-44	6-44	6-17	5-59	5-56	6-20
Heifers, good.....	9-11	8-34	8-95	9-55	8-89	8-04	6-82	5-09	5-67	4-94	5-13	5-80
Calves, veal.....	12-76	13-74	9-28	5-79	6-88	5-74	5-41	6-20	7-86	8-28	8-37	9-02
Hogs (fed and water- ed), selects.....	17-51	16-06	15-94	15-21	12-19	12-67	13-50	13-13	10-54	9-53	9-34	11-20
Hogs (fed and water- ed), lights.....	17-51	—	15-50	15-00	11-31	12-94	13-48	11-66	10-68	9-02	9-02	—
Lambs, good.....	12-18	12-54	12-13	12-00	—	10-92	8-83	7-70	7-31	7-77	7-89	9-44
Sheep, light.....	6-37	7-07	7-59	7-84	7-05	5-14	4-05	3-73	3-83	3-80	3-57	4-69
<b>Toronto—</b>												
Steers, 1000-1,200 lb., good.....	9-55	8-77	9-60	9-34	9-04	7-93	6-84	6-85	6-41	5-93	5-61	6-15
Heifers, good.....	9-06	7-93	8-94	8-81	8-74	7-30	6-67	6-22	5-95	5-28	5-60	5-96
Calves, veal.....	15-84	14-00	12-72	9-22	10-02	9-21	7-99	8-48	10-63	10-96	10-09	10-15
Hogs (fed and water- ed), selects.....	15-53	14-02	15-26	12-85	10-44	11-19	12-17	12-79	10-15	9-45	9-13	10-33
Hogs (fed and water- ed), lights.....	13-78	12-47	13-04	10-56	9-08	10-68	9-61	10-96	8-10	7-45	7-03	9-42
Lambs, good.....	12-41	11-65	13-38	13-52	12-82	14-50	11-30	9-06	8-38	8-35	8-71	1-21
Sheep, light.....	7-04	7-29	8-90	9-28	8-14	5-75	4-98	4-44	3-53	4-13	4-00	5-18
<b>Winnipeg—</b>												
Steers, 1,000-1,200 lb., good.....	7-45	7-53	7-98	8-18	8-06	6-91	5-53	4-90	4-71	4-37	4-42	4-61
Heifers, good.....	7-27	6-94	7-27	7-35	7-64	6-72	5-96	5-19	4-20	4-10	4-22	4-82
Calves, veal.....	7-43	8-03	8-86	8-61	8-61	8-13	6-21	5-69	5-06	3-80	3-98	4-47
Hogs (fed and water- ed), selects.....	13-90	13-67	13-80	13-35	11-67	10-72	12-05	13-70	12-54	10-99	9-62	9-32
Hogs (fed and water- ed), lights.....	13-18	13-14	12-84	13-16	11-75	10-89	12-25	13-64	11-85	10-91	9-68	9-15
Lambs, good.....	10-70	10-97	11-62	—	11-54	10-69	11-13	9-35	8-51	8-10	7-84	8-71
Sheep, light.....	6-30	7-06	7-14	7-50	7-33	6-77	5-84	5-95	4-93	4-70	4-43	4-80
<b>Calgary—</b>												
Steers, 1,000-1,200 lb., good.....	7-52	7-29	7-29	7-12	7-37	6-28	5-64	4-60	4-03	3-73	3-88	4-47
Heifers, good.....	6-65	6-08	6-38	6-25	6-16	5-44	5-22	3-94	3-70	3-17	3-25	3-39
Calves, veal.....	7-37	6-96	7-48	6-82	7-02	8-10	6-03	5-08	5-32	3-99	3-60	3-90
Hogs (fed and water- ed), selects.....	14-89	13-50	13-78	12-66	10-51	9-86	12-20	13-23	12-23	10-20	8-22	8-39
Hogs (fed and water- ed), lights.....	11-38	11-00	10-75	—	5-50	5-50	9-06	10-51	9-18	7-23	5-24	5-37
Lambs, good.....	11-05	10-87	10-75	9-86	8-74	9-44	9-16	7-48	7-23	6-80	6-78	6-75
Sheep, light.....	7-22	7-96	8-00	7-75	7-60	7-25	6-31	5-58	4-86	4-62	4-53	4-75
<b>Edmonton—</b>												
Steers, 1,000-1,200 lb., good.....	7-27	6-78	6-93	6-93	6-96	5-95	5-61	4-87	4-56	3-94	3-87	4-11
Heifers, good.....	6-39	6-07	5-81	5-71	6-56	5-25	5-25	4-17	3-21	3-20	3-48	3-93
Calves, veal.....	7-89	8-50	8-50	9-44	8-00	7-54	6-71	4-88	5-07	4-06	3-50	4-00
Hogs (fed and water- ed), selects.....	14-35	13-44	13-37	12-34	10-36	9-14	11-40	13-12	11-09	9-66	7-83	8-62
Hogs (fed and water- ed), lights.....	10-12	10-49	10-43	9-91	8-00	7-90	8-10	9-13	8-14	6-43	5-05	5-77
Lambs, good.....	9-60	10-00	10-13	9-50	9-50	11-28	9-80	7-82	7-05	6-53	6-69	7-46
Sheep, light.....	6-73	7-00	7-00	7-00	6-50	6-75	6-34	4-50	4-35	3-71	4-28	4-50

**40.—Average Prices per lb. paid by farmers for grade No. 1 Clover and Grass Seed, by provinces, during April and May, 1922, and Average Prices for Canada during April and May, 1919-22.**

Province.	Red Clover.	Alsike.	Alfalfa.	Sweet Clover.	Western Rye.	Timothy.	Brome Grass.
	cents	cents	cents	cents	cents	cents	cents
Prince Edward Island.....	32	26½	—	16	—	13½	—
Nova Scotia.....	32½	27	45	13	—	13½	—
New Brunswick.....	28½	25	25	18	—	13	—
Quebec.....	32½	28	34	15	—	10	—
Ontario.....	28½	22	30½	10	—	11	—
Manitoba.....	47½	42½	53½	20½	15½	18	17½
Saskatchewan.....	64	40	53	23½	16½	18	16½
Alberta.....	54	57½	81½	44½	30½	25½	30
British Columbia.....	55	53½	50½	37½	30	22½	30
Canada, 1922.....	32½	26½	38½	15½	17½	14	19
“ 1921.....	40½	41½	51½	20½	21½	16½	20
“ 1920.....	74½	69	65	45	38	23½	43
“ 1919.....	53½	44	43½	40	32	18½	37

41.—Average Prices per lb. paid to farmers for Clover and Grass Seed, by provinces, during April and May, 1922, and Average Prices for Canada during April and May, 1919-22.

Province.	Red Clover.	Alsike.	Alfalfa.	Sweet Clover.	Western Rye.	Timothy.	Brome Grass.
	cents	cents	cents	cents	cents	cents	cents
Prince Edward Island.....	25½	21½	—	13	—	10½	—
Nova Scotia.....	29	22½	—	—	—	12	—
New Brunswick.....	30½	22	—	13	—	12	—
Quebec.....	27	25	33	8½	—	12½	—
Ontario.....	18½	14	22½	10	—	7½	—
Manitoba.....	—	—	—	11	7½	9	9½
Saskatchewan.....	—	—	—	45	12½	25	9½
Alberta.....	—	—	—	—	—	7	9
British Columbia.....	—	—	—	—	—	—	—
Canada, 1922.....	21	16½	23½	11½	10½	9	9
“ 1921.....	29	28	26½	11	11½	12½	14
“ 1920.....	66	56	55	29	25	20½	29
“ 1919.....	44	36	38	23½	27	16	30½

**Index Numbers of Agricultural Prices.**—Records of the average prices received by farmers for agricultural produce have been collected annually since 1909 through the crop correspondents of the Census and Statistics Office and Dominion Bureau of Statistics. From these records annual index numbers have been calculated for each crop and for the field crops as a whole. The average prices for the five year pre-war period 1909-1913 have in each case been taken as 100, and the figures for each year are expressed as a percentage of these. In calculating the index numbers for the combined field crops, the various crops have been weighted according to the proportion which the value of each crop in each year bears to the total value for that year. Table 42 and its accompanying illustrative diagram show the great increase which took place in agricultural prices during the war period and the fall which took place in 1920 and 1921. The year 1921 will indeed be memorable for the great and sudden fall in the prices of agricultural produce, and the index numbers provide a convenient means of measuring its extent, as compared with previous years, and especially with the maximum prices, which were reached in 1919. For wheat, in 1921, the index number for Canada was 117.4, representing a drop of 117.3 points as compared with 1920 and of 226.1 points as compared with 1919. The price was only 17.4 p.c. above that of the pre-war base-period 1909-13. Oats and barley receded by 55.9 points and 76.6 points respectively from the records of 1920, and were exactly equal to the pre-war average for the five years 1909-13. The hay and clover price remained relatively high, but the index number was 21.8 points below that of 1920 and was 102.2 points above the pre-war average. This was due however, to the poorest hay crop on record, caused by the prolonged drought. The Canadian weighted index number for all field crops in 1921 was 147.5, or 57.4 points below that of 1920 and 47.5 points above that of the base-period.

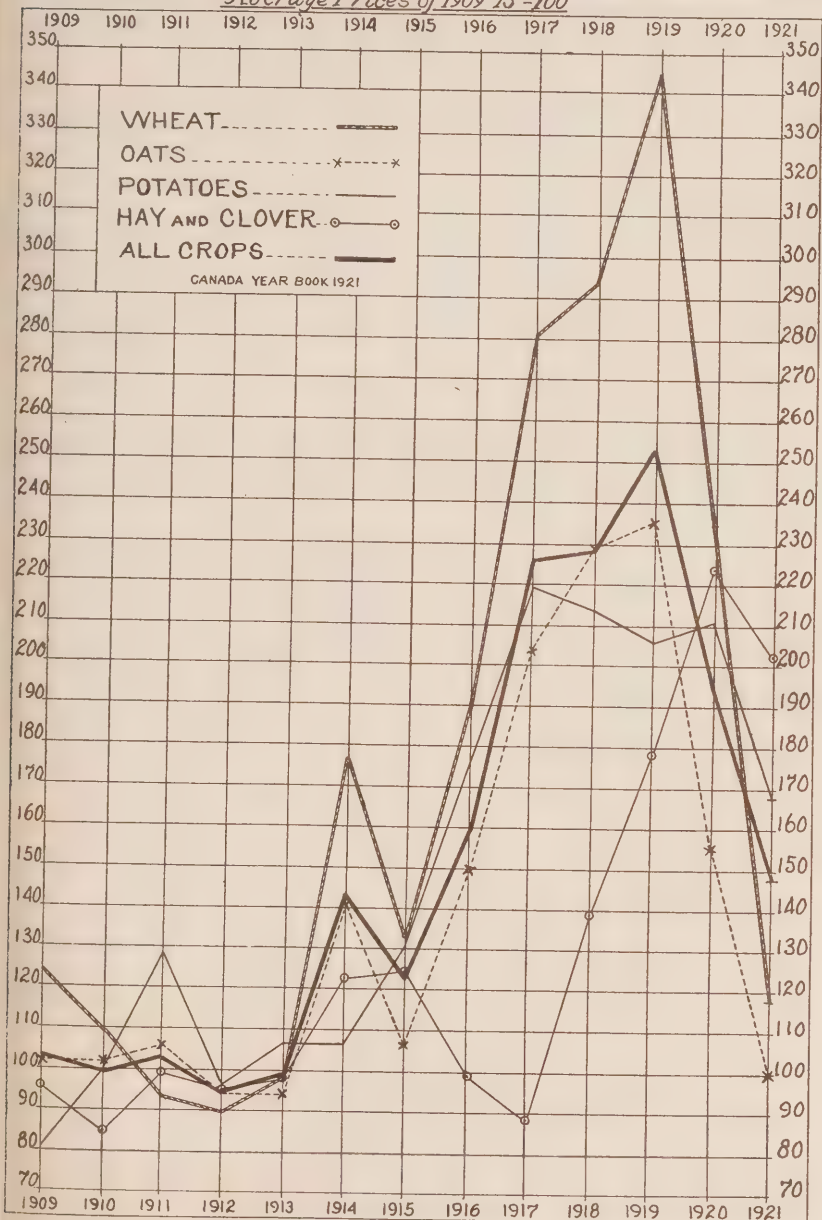


## 42.—Index Numbers of Agricultural Prices for Canada, 1909-1921.

Annual Average Prices, 1909-1913 = 100.

Field Crops.	Annual Average prices 1909-13	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	§	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Wheat.....	0.69	123.2	108.7	92.8	89.9	97.1	176.8	131.9	189.9	281.2	292.8	343.5	234.7	117.4
Oats.....	0.34	102.9	102.9	105.9	94.1	94.1	141.2	105.9	150.0	202.9	229.4	235.3	155.9	100.0
Barley.....	0.47	97.9	102.1	119.1	95.7	89.4	142.9	110.6	174.5	229.8	212.8	261.7	176.6	100.0
Rye.....	0.71	102.8	95.8	107.0	101.4	93.0	110.7	108.4	156.3	228.2	209.9	197.2	187.3	101.4
Peas.....	1.00	89.0	87.0	102.0	126.0	111.0	146.0	165.0	222.0	354.0	299.0	289.0	242.0	196.0
Beans.....	1.79	79.3	96.1	107.8	121.8	105.0	129.1	170.4	301.7	416.2	302.2	250.3	216.8	162.0
Buckwheat.....	0.61	95.1	93.4	104.9	101.6	104.9	118.0	123.0	175.4	239.3	259.0	245.9	209.8	145.9
Mixed grains.....	0.57	98.2	89.5	107.0	101.8	96.5	115.7	100.0	154.4	203.5	200.0	238.5	157.9	108.7
Flax.....	1.12	111.6	133.9	134.8	80.4	86.6	92.0	134.8	182.1	236.6	279.5	363.8	173.2	128.5
Corn for husking.....	0.63	104.8	84.1	101.6	98.4	101.6	112.7	112.7	169.8	292.1	277.8	206.3	184.1	131.7
Potatoes.....	0.46	80.4	100.0	128.2	95.7	106.5	106.5	130.4	176.1	219.6	213.1	206.5	210.8	167.3
Turnips, etc.....	0.22	77.3	104.5	109.1	109.1	127.3	122.7	109.1	177.3	209.1	195.1	227.3	186.4	154.5
Hay and clover.....	11.65	95.6	84.5	99.9	95.2	98.5	122.1	123.3	99.6	88.7	139.5	177.9	224.0	202.2
Fodder corn.....	4.95	109.7	94.9	98.4	99.6	96.6	99.2	99.2	99.4	103.8	124.2	139.8	156.6	142.4
Sugar beets.....	5.84	99.5	99.8	112.8	85.6	104.8	102.6	94.2	106.2	115.6	175.5	186.0	219.1	111.3
Alfalfa.....	11.59	-	87.7	99.4	103.5	102.2	122.3	109.4	92.2	100.0	153.9	188.5	205.3	172.1
All Field Crops.....	-	103.7	99.6	103.7	94.3	99.0	143.0	122.6	159.7	226.0	227.6	252.7	204.9	147.5

## INDEX NUMBERS OF AVERAGE PRICES OF FIELD CROPS, 1909-21

*Average Prices of 1909-13 = 100*

### MISCELLANEOUS AGRICULTURAL STATISTICS.

**Production and Value of Wool.**—According to estimates published by the Dominion Bureau of Statistics, the estimated production of wool in 1921 was, by provinces, as in Table 43.<sup>1</sup>

**43.—Estimated Production of Wool by Provinces, 1921.**

Province.	Sheep and Lambs.	Sheep.	Sheep's wool.	Lambs.	Lambs' wool.	Total wool.
	No.	No.	lb.	No.	lb.	lb.
Prince Edward Island.....	131,763	75,368	527,576	56,395	225,580	753,156
Nova Scotia.....	324,260	185,476	1,298,332	138,784	555,136	1,853,468
New Brunswick.....	236,951	135,535	948,745	101,416	405,664	1,354,409
Quebec.....	1,006,620	575,787	4,030,509	430,833	1,723,332	5,753,841
Ontario.....	1,081,828	618,806	4,331,642	463,022	1,852,088	6,183,730
Manitoba.....	131,361	87,617	613,319	43,744	174,976	788,295
Saskatchewan.....	188,021	125,410	877,870	62,611	250,444	1,128,314
Alberta.....	523,599	349,240	2,444,680	174,359	697,436	3,142,116
British Columbia.....	51,457	29,433	206,031	22,024	88,096	294,127
Total.....	3,675,860	2,182,672	15,278,704	1,493,188	5,972,752	21,251,456

The total wool clip of Canada for 1921 was therefore placed provisionally at about 21,251,000 lb., as compared with 24,000,000 lb. in 1920, the estimate for 1920 being subject to correction by the census returns when available. At an average value for unwashed wool of 14 cents per lb., the total value of the wool clip of 1921 amounted to \$2,975,000, as compared with \$5,280,000 in 1920. The average prices per lb., for washed and unwashed wool, by provinces, for the years 1915 to 1921 are given in Table 13. For Canada the price in 1921 was 14 cents per lb. for unwashed and 22 cents per lb. for washed wool. These are the lowest averages for wool since records were first taken in 1909.

Table 44 shows the total estimates of production and value for 1921, compared with the years 1915 to 1920, as previously published.

**44.—Production and Value of Wool in Canada, 1915-21.**

Year.	Sheep.	Production of Wool.	Average price per lb. of Wool.	Value.
	No.	lb.	cents.	\$
1915.....	2,038,662	12,000,000	28	3,360,000
1916.....	2,022,941	12,000,000	37	4,440,000
1917.....	2,369,358	12,000,000	59	7,000,000
1918.....	3,052,748	20,000,000	60	12,000,000
1919.....	3,421,958	20,000,000	60	12,000,000
1920.....	3,720,783	24,000,000	22	5,280,000
1921.....	3,675,860	21,251,000	14	2,975,000

**Egg Production in Canada, 1920 and 1921.**—Calculations published by the Dominion Bureau of Statistics place the egg production of Canada in 1921 at 161,971,000 dozen, from 25,780,356 hens on farms, as compared with 121,604,000 dozen from 25,942,105 hens on farms in 1920. Eggs from other than farms are not included.<sup>2</sup>

<sup>1</sup>See Monthly Bulletin of Agricultural Statistics, February 1922 (Vol. 15, No. 162, p. 61).  
<sup>2</sup>Monthly Bulletin of Agricultural Statistics, November, 1921 (Vol. 14, No. 159), p. 444.

**Tobacco.**—Table 45 gives the area and yield of tobacco in Ontario and Quebec for the three years 1919 to 1921.

**45.—Area and Yield of Tobacco in Canada, 1919-21.**

Province.	1919.	1920.	1921.	1919.	1920.	1921.	1919.	1920.	1921.
	acres.	acres.	acres.	lb.	lb.	lb.	lb. per acre.	lb. per acre.	lb. per acre.
Ontario .....	9,226	20,114	6,553	17,000,000	21,688,500	7,121,962	1,843	1,078	1,091
Quebec .....	22,360	33,000	5,256	16,770,000	26,400,000	6,127,000	750	800	1,166
Totals and averages	31,586	53,114	11,809	33,770,000	48,088,500	13,248,962	1,069	905	1,124

The prices paid for the Ontario crop of 1921 were for the bright tobacco, flue-cured, from 42 to 45 cents per lb. For white Burley the price paid was from 10 to 12 cents per lb., the average being about 17.5 cents and the average for the whole being 25 cents per lb. In Quebec, the prices for the best grades of cigar tobacco of the crop of 1921 ranged from 10 to 12 cents per lb, and the average for the whole crop of 1921 did not exceed 10 cents per lb. For Ontario, the average revised price of the crop of 1920 was 15 cents and that for Quebec 10 cents per lb. Applying these averages to the estimated production, the value of the crops of 1921 was for Ontario \$1,780,490 (7,121,962 lb. at 25 cents per lb.), as compared with \$3,253,275 in 1920 (21,688,500 lb. at 15 cents per lb.) and for Quebec \$612,700 (6,127,000 lb. at 10 cents per lb.), as compared with \$2,640,000 (26,400,000 lb. at 10 cents per lb.) in 1920. For both provinces the total estimated value of the tobacco crop in 1921 was \$2,393,190, as compared with \$5,893,275 in 1920.<sup>1</sup>

**Agricultural Instruction Act.**—Under the Agricultural Instruction Act of 1913 (3 Geo. V, c. 5), appropriations are annually payable, for a period of ten years ending March 31, 1923, by the Dominion Government to each of the Provincial Governments of Canada for the encouragement of agriculture "through education, instruction and demonstration carried on along lines well devised and of a continuous nature" and for the purpose of assisting in the work of veterinary colleges established in the provinces. The annual appropriation now amounts to \$1,100,000 and is allocated by provinces as follows: Prince Edward Island, \$31,749.22; Nova Scotia, \$81,716.69; New Brunswick, \$64,110.80; Quebec, \$271,113.76; Ontario, \$336,303.26; Manitoba, \$77,113.11; Saskatchewan, \$81,728.48; Alberta, \$66,965.22; British Columbia, \$69,199.06; Veterinary Colleges, \$20,000.00. Report on the Agricultural Instruction Act for the year 1920-21 was published in 1921 [No. 15a-1922].

<sup>1</sup>For details of the production of tobacco in Ontario and Quebec by counties, for the year 1921, see Monthly Bulletin of Agricultural Statistics, January 1922 (Vol. 15, No. 161), pp. 28-34.



**Sugar Beets and Beetroot Sugar.**—There are three sugar factories in Canada which manufacture sugar from Canadian grown sugar beets. They are situated at Chatham, Wallaceburg and Kitchener, in the province of Ontario, and are under the control of the Dominion Sugar Company, Ltd., of Chatham. From 1903 until 1914, when it went out of business, there was also in operation the Knight Sugar Company of Raymond in Alberta. Table 46 gives particulars respecting the area, yield and value of sugar beet as a farm crop and of the production of refined sugar made from Canadian-grown sugar beets for the year 1920, with the comparative figures for the years 1911-19.

**46.—Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar, 1911-1920.**

Year.	Acres grown.	Yield per acre.	Total yield.	Average price per ton.	Total value.	Production of refined beetroot sugar.
	Acres.	Tons.	Tons.	\$	\$	lb.
1911.....	20,677	8.50	175,000	6.59	1,154,000	21,329,689
1912.....	18,900	10.50	201,000	5.00	1,005,000	26,767,287
1913.....	17,000	8.75	148,000	6.12	906,000	26,149,216
1914.....	12,100	9.00	108,600	6.00	651,000	31,314,763
1915.....	18,000	7.75	141,000	5.50	775,500	39,515,802
1916.....	15,000	4.75	71,000	6.20	440,000	17,024,377
1917.....	14,000	8.40	117,600	6.75	793,800	23,376,850
1918.....	18,000	11.25	204,000	12.71	2,593,715	50,092,835
1919.....	18,800	9.50	180,000	14.61	2,630,027	37,839,271
1920.....	34,491	9.94	343,000	15.47	5,307,243	89,280,719

The results for the year 1920 constituted a record, whether as regards the area, yield and value of the roots grown or the production of refined beetroot sugar. The area and yield of the roots grown were nearly double and the value of the roots as well as the quantity of refined sugar was more than double the returns of 1919. The value of the beetroot sugar produced in 1920 was \$12,856,424, representing an average wholesale price per lb. of 14.4 cents, as compared with \$3,924,411 and 10.4 cents per lb. in 1919 and \$4,358,077 and 8.7 cents per lb. in 1918.

**Maple Sugar.**—The maple sugar industry of Canada is carried on in the provinces of Quebec, Ontario, New Brunswick, and Nova Scotia. From 1851 to 1861 the average yearly production was about 13,500,000 lb., from 1861 to 1871 about 17,500,000 lb., from 1871 to 1881, 19,000,000 lb., and from 1881 to 1891 about 22,000,000 lb. During the next decade the yearly average fell to about 21,200,000 lb., and in more recent years to little less than 20,000,000 lb. In the Maritime Provinces the yearly output has rarely exceeded 500,000 lb. Quebec produces about 14,300,000 lb. and Ontario 5,000,000 lb. per annum. It is estimated that the industry, which represents an annual value of almost \$2,000,000, is carried on by about 50,000 growers. Table 47 shows the production and value of maple products in the province of Quebec according to the annual statistics of the Dominion and Quebec Bureaus of Statistics as follows:

## 47.—Maple Products in the Province of Quebec, 1918-1921.

Year.	Maple Sugar.	Maple Syrup.	Total Value.
	lb.	gallons.	\$
1918.....	10,173,622	1,928,201	4,418,344
1919.....	12,353,667	1,470,275	6,396,535
1920.....	15,615,141	1,449,649	6,743,141
1921.....	12,285,514	1,375,685	4,318,970

**Stocks of Grain in Canada<sup>1</sup>**—Table 48 shows the quantities of grain in farmers' hands at the close of the Canadian crop year on August 31, 1921, with comparative figures for the two previous years, as compiled from the estimates of crop correspondents. Adding the stocks in the elevators and flour mills, Table 49 shows the total quantities of grain in store at the close of each of the crop years, 1919, 1920 and 1921.

## 48.—Stocks of Grain in Farmers' hands in Canada at the end of August, 1919-1921.

Grain.	Total production in 1918.	In farmers' hands Aug. 31, 1919.		Total production in 1919.	In farmers' hands Aug. 31, 1920.		Total production in 1921.	In farmers' hands Aug. 31, 1921.	
	000 bush.	p.c.	000 bush.	000 bush.	p.c.	000 bush.	000 bush.	p.c.	000 bush.
Wheat.....	189,075	1.14	2,149	193,260	1.10	2,122	263,189	0.81	2,144
Barley.....	77,287	1.86	1,437	56,389	1.39	781	63,311	1.69	1,073
Oats.....	426,313	3.79	16,137	394,387	2.16	8,515	530,710	5.59	29,657
Rye.....	—	—	—	10,207	0.62	63	11,306	0.52	58
Flaxseed.....	—	—	—	5,473	1.45	79	7,998	0.63	51

## 49.—Stocks of Grain in Canada at the close of the Crop Years, 1919, 1920 and 1921.

Quantities in	Wheat.			Barley.		
	Aug. 30, 1919.	Aug. 31, 1920.	Aug. 31, 1921.	Aug. 30, 1919.	Aug. 31, 1920.	Aug. 31, 1921.
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' Hands.....	2,149,000	2,122,300	2,144,400	1,437,100	781,100	1,072,900
Country Elevators in West.....	762,362	980,000	1,566,689	275,225	210,000	792,955
Terminal Elevators.....	433,920	1,603,811	2,367,181	244,566	171,703	827,962
Public Elevators.....	2,108,884	4,316,527	874,045	1,888,502	337,301	491,884
Eastern Elevators.....	—	30,007	23,260	—	326	7,718
Flour Mills.....	—	237,780	719,624	—	2,000	27,287
Transit by rail.....	—	—	6,031,889	—	—	628,733
Totals.....	5,454,166	9,290,425	13,727,088	3,345,393	1,502,430	3,849,439

Quantities in	Oats.			Rye.		
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' Hands.....	16,137,100	8,515,200	29,657,300	—	62,900	58,500
Country Elevators in West.....	735,258	560,000	3,195,676	6,642	—	15,025
Terminal Elevators.....	1,371,043	339,829	4,668,256	152,209	58,209	393,106
Public Elevators.....	1,036,555	240,100	4,724,616	—	—	23,379
Eastern Elevators.....	—	10,942	27,562	—	308	5,920
Flour Mills.....	—	14,846	350,938	—	355	5,698
Transit by rail.....	—	—	1,336,001	—	—	328,922
Totals.....	19,279,956	9,680,917	43,960,349	158,851	121,772	830,550

<sup>1</sup>See Monthly Bulletin of Agricultural Statistics, September, 1921 (Vol. 14, No. 157), p. 363, and April, 1922 (Vol. 15, No. 164), p. 126.

**49.—Stocks of Grain in Canada at the close of the Crop Years, 1919, 1920 and 1921—concluded.**

Quantities in	Flaxseed.		
	Aug. 30, 1919.	Aug. 31, 1920.	Aug. 31, 1921.
	bush.	bush.	bush.
Farmers' Hands.....	—	79,200	50,700
Country Elevators in West.....	15,047	48,000	195,402
Terminal Elevators.....	37,610	466,086	1,465,369
Public Elevators.....	—	21,629	53,049
Eastern Elevators.....	—	1,208	20
Transit by rail.....	—	—	39,458
<b>Totals.....</b>	<b>52,657</b>	<b>616,123</b>	<b>1,803,998</b>

According to Table 49 therefore, on August 31, 1921, about 13,727,000 bushels of wheat, 3,849,500 bushels of barley, 43,960,000 bushels of oats, 830,500 bushels of rye and 1,804,000 bushels of flaxseed constituted the "carry over" into the new crop year running from September 1, 1921, to August 31, 1922.

Table 50 gives the results of inquiries as to the quantities of wheat, and wheat flour expressed as wheat, in Canada on March 31, 1922, with the corresponding figures for 1918 to 1921.

**50.—Stocks of Wheat in Canada, March 31, 1918-22.**

Wheat in	March 31, 1918.	March 31, 1919.	March 31, 1920.	March 31, 1921.	March 31, 1922.
		bush.	bush.	bush.	bush.
Elevators.....	20,525,213	69,983,064	30,622,398	35,802,362	58,338,581
Flour mills.....	4,802,236	5,390,066	5,575,253	3,635,818	4,000,000
Transit by rail.....	20,011,179	10,854,840	6,271,697	7,119,983	10,998,505
Farmers' hands.....	31,684,700	32,315,000	34,837,000	48,919,000	41,649,000
<b>Totals.....</b>	<b>77,023,328</b>	<b>118,542,970</b>	<b>77,306,348</b>	<b>95,477,163</b>	<b>114,986,086</b>

Table 51 gives for oats, barley and flaxseed the stocks in Canada on March 31, 1922, as compared with the corresponding date of the previous year.

**51.—Stocks in Canada of Oats, Barley and Flaxseed, March 31, 1921 and 1922.**

Grain in	Oats.		Barley.		Flaxseed.	
	March 31, 1921.	March 31, 1922.	March 31, 1921.	March 31, 1922.	March 31, 1921.	March 31, 1922.
	bush.	bush.	bush.	bush.	bush.	bush.
Elevators.....	35,543,135	21,852,211	6,048,900	5,536,623	3,315,002	1,390,583
Flour mills.....	670,321	150,000	58,638	14,000	—	—
Transit by rail.....	3,462,583	6,003,399	1,205,396	1,102,649	741,039	179,711
Farmers' hands.....	206,938,000	147,604,000	17,532,000	14,901,000	1,808,000	618,000
<b>Totals.....</b>	<b>246,614,039</b>	<b>175,609,610</b>	<b>24,844,934</b>	<b>21,554,272</b>	<b>5,864,041</b>	<b>2,188,294</b>

**Distribution of the Canadian Wheat and Oat Crops.**—  
Table 52 shows the distribution of the wheat crops of 1920 and 1921.

## 52.—Distribution of the Canadian Wheat Crops of 1919 and 1920.

Items.	Crop year ended Aug. 31, 1920.	Crop year ended Aug. 31, 1921.	Items.	Crop year ended Aug. 31, 1920.	Crop year ended Aug. 31, 1921.
	000 bush.	000 bush.		000 bush.	000 bush.
Carry over Sept. 1, 1919-21.	5,615	9,848	Exports as grain.....	63,926	136,174
Gross production.....	193,260	263,189	Exports as flour.....	25,541	30,990
Loss in cleaning.....	5,798	7,896	Total exports.....	89,467	167,164
Grain not merchantable....	10,830	10,527	Retained for seed.....	32,000	40,707
Net production.....	176,632	244,766	Milled for food.....	58,000	39,479
Imports.....	206	592	Carried over, August 31, 1920-21.....	9,848	7,856
Available for distribution..	182,453	255,206	Unaccounted for.....	6,862	-

NOTE.—Flour is expressed as wheat on the basis of 1 barrel of flour weighing 196 lb. being equal to 4½ bushels of wheat.

As regards the commercial movement of the crop, Table 52 is constructed in general conformity with the data published by the Internal Trade Branch of the Dominion Bureau of Statistics. It will be noted that for the year ended August 31, 1920, the whole of the estimated gross production of 193,260,000 bushels of wheat is accounted for with the exception of a plus balance of 6,862,000 bushels, or about 3½ p.c. of the total. For 1921, the figures exactly balance.

Table 53 presents similar data in respect of oats. The bulk of this crop is consumed as food for live stock, and the table shows approximately how the remaining portion of the crop is disposed of, including the quantities exported as grain, oatmeal and rolled oats, the quantity retained for seed and the quantity milled for home consumption, representing chiefly oatmeal and rolled oats used for human food. The carry over represents grain in the elevators, in farmers' hands, in transit, etc., and the balance is the quantity consumed in Canada for feeding to live stock, the amount being estimated at 379,914,000 bushels in 1921 and 298,862,000 bushels in 1920.<sup>1</sup>

## 53.—Distribution of the Canadian Oat Crops of 1919 and 1920.

Items.	Crop year ended Aug. 31, 1920.	Crop year ended Aug. 31, 1921.	Items.	Crop year ended Aug. 31, 1920.	Crop year ended Aug. 31, 1921.
	000 bush.	000 bush.		000 bush.	000 bush.
Carry over, Sept. 1, 1919-21.	19,372	10,113	Exports as grain.....	15,356	28,715
Gross production.....	394,387	530,710	Exports as meal, etc.....	3,128	3,046
Grain not merchantable....	40,427	34,015	Total exports.....	18,484	31,761
Net production.....	353,960	496,695	Retained for seed.....	39,624	42,373
Imports.....	1,920	1,021	Milled for home consumption.....	8,169	11,008
Available for distribution..	375,252	507,829	Carry over, August 31, 1920-21.....	10,113	42,773
			Balance for home consumption as grain.....	298,862	379,914

<sup>1</sup> For similar calculations extending over a series of years both for wheat and oats, see the Year Book of 1920, pp. 263-266 and the Monthly Bulletin of Agricultural Statistics for April, 1920 (Vol. 13, No. 140), p. 75 and April, 1922 (Vol. 15, No. 164), p. 127.



**Per Capita Consumption of Wheat in Canada.**—It is calculated that for the period of ten years ended August 31, 1919, the average per capita consumption of wheat in Canada was 5·8 bushels, that during the four years of war (1915–18) the rate was 4·2 bushels and that during the five-year pre-war period from 1910 to 1914 it was 7·7 bushels. These rates represent the gross per capita consumption after accounting for the whole of the production in the way of losses due to cleaning and unmerchantable grain, adding the imports and deducting exports and grain retained for seed. During recent years the Dominion Bureau of Statistics has perfected arrangements for the periodical collection of statistics of wheat milled in Canada. These indicate on the basis of three years' returns that the per capita consumption of wheat is 5·4 bushels, a figure only 0·4 bushels below that of 5·8 bushels, the average above given for the ten year period ended August 31, 1919. A report on the Flour Milling Industry of Canada for 1920, issued in March, 1922, by the Industrial Census Division of the Bureau placed the per capita consumption of wheat flour in Canada for the calendar year 1920 at 0·96 barrel, representing, at 4·5 bushels to the barrel, 4·3 bushels. According to the quantity shown in Table 52 as milled in the crop year ended August 31, 1921, viz., 39,479,000 bushels, the per capita consumption is 4·5 bushels, an excess difference of only 0·2 bushel. The rate shown by the Industrial Census Branch applies, however, only to a single year. The milling statistics of the Internal Trade Division include offals, whilst those of the Industrial Census Branch represent the pure flour as used for food. The rate for the ten years 1910 to 1919 represents still more calculations that are gross rather than net. Altogether the conclusion appears to be justified that the average per capita consumption of wheat in Canada is close to 5 bushels, either slightly more or slightly less.

**Agricultural Revenue and Wealth of Canada.**—Table 54 shows under principal headings the gross agricultural revenue of Canada, by provinces, for each of the four years 1918 to 1921. It is important to observe that the figures represent gross values, because it is not possible to distinguish between crops used as materials for other kinds of production, such as the feeding of live stock, nor to allow for the costs of production.<sup>1</sup>

<sup>1</sup>For explanation of the methods used in estimating values, see the original article in the *Monthly Bulletin of Agricultural Statistics* for March, 1922 (Vol. 15, No. 163), pp. 85-89.

54.—Estimated Gross Annual Agricultural Revenue of Canada, by Provinces,  
1918-1921.

("000" omitted).

Items.	1918.	1919.	1920.	1921.
<b>Canada—</b>				
Field Crops.....	\$ 1,372,936	\$ 1,537,169	\$ 1,455,244	\$ 931,865
Farm Animals.....	194,498	186,679	143,854	98,424
Wool.....	12,400	11,000	5,280	2,975
Dairy Products.....	200,341	251,527	260,337	260,337
Fruits and Vegetables.....	40,000	40,000	40,000	40,000
Poultry and Eggs.....	40,000	40,000	45,000	55,000
Fur Farming.....	1,048	1,048	1,140	1,065
Maple Products.....	5,258	7,447	4,533	4,174
Tobacco.....	4,270	15,620	5,893	2,393
Flax fibre.....	2,286	5,524	434	—
<b>Totals.....</b>	<b>1,873,037</b>	<b>2,096,014</b>	<b>1,961,715</b>	<b>1,396,233</b>
<b>Prince Edward Island—</b>				
Field Crops.....	16,278	22,367	18,530	14,203
Farm Animals.....	1,772	2,315	1,682	1,059
Wool.....	296	370	185	98
Dairy Products.....	1,600	2,231	4,102	4,102
Fruits and Vegetables.....	300	300	300	300
Poultry and Eggs.....	720	720	810	990
Fur Farming.....	833	833	767	679
<b>Totals.....</b>	<b>21,799</b>	<b>29,136</b>	<b>26,376</b>	<b>21,431</b>
<b>Nova Scotia—</b>				
Field Crops.....	42,486	63,357	47,847	29,557
Farm Animals.....	4,654	5,074	4,122	2,235
Wool.....	1,055	840	554	278
Dairy Products.....	2,632	3,719	7,077	7,077
Fruits and Vegetables.....	3,900	3,900	3,900	3,900
Poultry and Eggs.....	800	800	900	1,100
Fur Farming.....	54	54	49	58
Maple Products.....	40	45	45	29
<b>Totals.....</b>	<b>55,621</b>	<b>77,789</b>	<b>64,494</b>	<b>44,234</b>
<b>New Brunswick—</b>				
Field Crops.....	42,891	53,134	46,357	38,326
Farm Animals.....	3,681	4,869	3,934	2,315
Wool.....	569	684	370	176
Dairy Products.....	1,419	2,214	4,616	4,616
Fruits and Vegetables.....	1,600	1,600	1,600	1,600
Poultry and Eggs.....	960	960	1,080	1,320
Fur Farming.....	55	55	127	42
Maple Products.....	50	53	53	63
<b>Totals.....</b>	<b>51,225</b>	<b>63,569</b>	<b>58,137</b>	<b>48,458</b>
<b>Quebec—</b>				
Field Crops.....	276,777	309,963	330,251	219,154
Farm Animals.....	40,862	37,683	31,250	20,262
Wool.....	3,896	3,238	1,478	1,203
Dairy Products.....	58,004	68,432	65,093	65,093
Fruits and Vegetables.....	9,200	9,200	9,200	9,200
Poultry and Eggs.....	5,040	5,040	5,670	6,930
Fur Farming.....	49	49	40	94
Maple Products.....	4,418	6,349	3,180	2,742
Tobacco.....	2,320	6,780	2,640	613
<b>Totals.....</b>	<b>400,566</b>	<b>446,734</b>	<b>448,802</b>	<b>325,291</b>
<b>Ontario—</b>				
Field Crops.....	384,014	383,574	375,747	239,627
Farm Animals.....	68,916	70,288	59,953	36,051
Wool.....	3,949	3,542	1,663	615
Dairy Products.....	102,216	130,041	124,947	124,947
Fruits and Vegetables.....	17,200	17,200	17,200	17,200
Poultry and Eggs.....	14,400	14,400	16,200	19,800
Fur Farming.....	11	11	52	58
Maple Products.....	750	1,000	1,255	1,340
Tobacco.....	1,950	8,840	3,253	1,780
Flax fibre.....	2,286	5,524	434	—
<b>Totals.....</b>	<b>595,692</b>	<b>634,420</b>	<b>600,704</b>	<b>441,418</b>

**54.—Estimated Gross Annual Agricultural Revenue of Canada, by Provinces,  
1918-1921—concluded.**  
(\*000 omitted).

Items.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$
<b>Manitoba—</b>				
Field Crops.....	180,508	182,097	133,990	72,136
Farm Animals.....	13,781	12,990	9,342	5,738
Wool.....	556	538	211	71
Dairy Products.....	11,420	13,092	15,084	15,084
Fruits and Vegetables.....	1,900	1,900	1,900	1,900
Poultry and Eggs.....	3,640	3,640	4,095	5,005
Fur Farming.....	—	—	—	82
<b>Totals.....</b>	<b>211,805</b>	<b>214,257</b>	<b>164,622</b>	<b>100,016</b>
<b>Saskatchewan—</b>				
Field Crops.....	299,362	340,030	271,213	215,635
Farm Animals.....	24,033	22,946	15,076	12,229
Wool.....	546	472	238	135
Dairy Products.....	6,051	9,346	13,516	13,516
Fruits and Vegetables.....	1,400	1,400	1,400	1,400
Poultry and Eggs.....	7,840	7,840	8,820	10,780
Fur Farming.....	—	—	78 <sup>1</sup>	27
<b>Totals.....</b>	<b>339,232</b>	<b>382,034</b>	<b>310,341</b>	<b>253,722</b>
<b>Alberta—</b>				
Field Crops.....	113,072	158,044	204,292	82,780
Farm Animals.....	33,164	26,353	16,054	16,065
Wool.....	1,349	1,172	528	375
Dairy Products.....	10,387	14,620	17,616	17,616
Fruits and Vegetables.....	1,500	1,500	1,500	1,500
Poultry and Eggs.....	4,480	4,480	5,040	6,160
Fur Farming.....	26 <sup>2</sup>	26 <sup>2</sup>	12	16
<b>Totals.....</b>	<b>163,978</b>	<b>206,195</b>	<b>245,042</b>	<b>124,512</b>
<b>British Columbia—</b>				
Field Crops.....	17,548	24,603	27,017	20,447
Farm Animals.....	3,635	4,161	2,441	2,470
Wool.....	184	144	53	24
Dairy Products.....	6,612	7,832	8,286	8,286
Fruits and Vegetables.....	3,000	3,000	3,000	3,000
Poultry and Eggs.....	2,120	2,120	2,385	2,915
Fur Farming.....	20	20	15	993
<b>Totals.....</b>	<b>33,119</b>	<b>41,880</b>	<b>43,197</b>	<b>37,151</b>

<sup>1</sup>Including Manitoba. <sup>2</sup>Including Manitoba and Saskatchewan.

<sup>3</sup>Including the Yukon territory.

The table shows that for 1921 the total agricultural revenue of Canada was \$1,396,233,000, as compared with \$1,961,715,000 in 1920, \$2,096,014,000 in 1919, and \$1,873,037,000 in 1918. The total for 1921, viz., \$1,396,233,000, shows a decrease as compared with 1919 of \$699,791,000 or over 33 p.c., and as compared with 1920, a decrease of \$565,482,000, or 28 p.c. The decrease is attributable mainly to the fall in prices, which reached their maximum in 1919. By provinces for 1921, Ontario leads with a total value of \$441,418,000; next comes Quebec with the value of \$325,291,000; and then follow in the order given: Saskatchewan \$253,722,000; Alberta \$124,512,000; Manitoba \$100,016,000; New Brunswick \$48,458,000; Nova Scotia \$44,234,000; British Columbia \$37,151,000; and Prince Edward Island \$21,431,000. As between 1920 and 1921 the difference is chiefly in field crops and farm animals, the value of the former having fallen by \$523,379,000, or 35 p.c., and that of the latter by \$45,430,000, or 31.6 p.c.

In Table 55 are given the results of calculations showing, approximately, by provinces, for 1921, the total agricultural wealth of the Dominion.

**55.—Estimated Gross Agricultural Wealth of Canada, by Provinces, 1921.**

("000 omitted).

Description.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Land.....	23,300	62,528	39,587	508,758	734,108
Buildings.....	14,031	51,931	37,772	257,094	377,253
Implements.....	4,475	5,723	7,634	64,943	97,168
Live Stock.....	7,840	19,716	19,908	127,515	224,024
Poultry.....	684	730	922	4,834	13,628
Animals on Fur Farms.....	3,730	277	634	378	293
Agricultural Production.....	21,431	44,234	48,458	325,291	441,418
<b>Totals.....</b>	<b>75,491</b>	<b>185,139</b>	<b>154,915</b>	<b>1,288,813</b>	<b>1,887,692</b>

Description.	Manitoba.	Saskatche- wan.	Alberta.	British Columbia.	Canada.
	\$	\$	\$	\$	\$
Land.....	355,468	863,961	439,460	169,706	3,196,876
Buildings.....	74,440	121,703	66,113	35,375	1,035,712
Implements.....	44,887	111,170	51,224	4,436	391,660
Live Stock.....	65,635	154,865	128,579	18,638	766,720
Poultry.....	3,467	7,463	4,251	2,028	38,007
Animals on Fur Farms.....	—	272 <sup>1</sup>	199	41	5,824
Agricultural Production.....	100,016	253,712	124,512	37,151	1,396,223
<b>Totals.....</b>	<b>643,913</b>	<b>1,513,146</b>	<b>814,338</b>	<b>267,375</b>	<b>6,831,022</b>

<sup>1</sup>Including Manitoba.

The gross agricultural wealth of Canada for 1921 is estimated at \$6,831,022,000, as compared with the estimate for 1920 of \$7,612,-151,000, a decrease of \$781,129,000, or about 10 p.c. The comparison is however slightly affected by greater completeness in the items included for 1921.

**Agricultural Implements.**—The Dominion Bureau of Statistics reports that the production in 1920 of the group manufacturing agricultural implements, including cream separators, pumps and windmills, was valued at \$50,301,302. The increase in the output over 1919 was \$9,237,961, or 22.5 p.c. The imports during the calendar year 1920 were \$28,188,576, and the exports comprised implements valued at \$12,399,116. By inference the agricultural implements rendered available for the farming community were worth approximately \$66,090,762. The chief implement in this connection was the tractor of which 1,054 were produced at a valuation of \$1,548,840, while the imports were 13,494, value \$13,459,814, and the exports were not separately reported. Making no allowance for exports, the number of tractors rendered available was thus 14,548. The threshers made available for addition to the farming equipment of the country were worth approximately \$4,513,307. The production of harvesters was 35,884, value \$6,129,236, and the visible supply



amounted to 28,002 only. The 81,142 ploughs produced in Canadian factories were worth \$4,773,503, while the visible supply was worth about \$3,614,324. Cream separators with a value of about \$2,506-532 were made available, as compared with a production of 31,001, value \$1,683,634.

#### INTERNATIONAL AGRICULTURAL STATISTICS.

**World's Production of Cereals and Potatoes.**—Table, constructed from data published by the International Institute of Agriculture, either in the new International Year Book of Agricultural Statistics 1909 to 1921, or in the monthly International Crop Report and Agricultural Statistics, shows the area and yield of wheat, rye, barley, oats, corn and potatoes in various countries of the world for the years 1920 and 1921 in countries of the northern hemisphere, and for years 1920-21 and 1921-22 in countries of the southern hemisphere (Argentina, Chile, Uruguay, South Africa, Australia and New Zealand). The Table includes also for purposes of comparison the annual average areas and yields for the five years 1915-19 (1915-16 to 1919-20 for the southern hemisphere) and the areas and yields of 1921 in the form of percentages of 1920 (1920-21) and of the five-year averages. Owing to the changes in territorial distribution consequent upon the war, it is not possible to give the five-year averages in the case of certain countries, as for instance Hungary, Latvia, Poland, Roumania and Czecho-Slovakia in the case of wheat. Therefore the plan adopted is to give two separate totals (1) for all the countries for which the data are complete, including the five year averages, and (2) for all the countries for which the data are complete in respect of the two years 1920 and 1921.

*Wheat.*—For 33 countries the production of wheat in 1921 was 2,751,330,000 bushels from 191,572,000 acres, as compared with 2,660,132,000 bushels from 188,640,000 acres in 1920, and 2,599,902,000 bushels from 186,965,000 acres, the five year-average. The area under wheat in these countries in 1921 was 1.5 p.c. above that of 1920, and 2.5 p.c. above the five-year average; the yield in 1921 was 3.4 p.c. above that of 1920 and 5.8 p.c. above the five-year average. The average yield per acre was in 1921 14.3 bushels as compared with 14.1 bushels in 1920 and 13.9 bushels, the five-year average. Adding the five countries (Hungary, Latvia, Poland, Roumania, and Czecho-Slovakia) the production for 38 countries is 3,129,604,000

bushels from 204,984,000 acres, as compared with 2,945,338,000 bushels from 199,775,000 acres in 1920, an increase for area of 2.6 p.c. and for yield of 6.2 p.c. as compared with 1920. The average yield per acre for the 38 countries is 15.3 bushels, as against 14.7 bushels in 1920.

*Rye.*—In 19 countries the production of rye was in 1921, 540,298,000 bushels from 25,628,000 acres, as against 437,248,000 bushels from 24,480,000 acres in 1920 and against 471,886,000 bushels from 24,954,000 acres, the annual averages for the five years 1915-19. (1915-16—1919-20). The area was therefore 4.6 p.c. above that of 1920 and 2.7 p.c. above the five-year average; the yield in 1921 was 23.6 p.c. above that of 1920 and 14.5 p.c. above the five-year average. The average yield per acre was in 1921, 21.1 bushels, as against 17.9 bushels in 1920 and 18.9 bushels, the five-year average. Including the six extra countries, making 25 in all, the yield was 804,342,000 bushels from 39,388,300 acres in 1921, as against 581,454,000 bushels from 36,596,300 acres in 1920, the percentage increase being 38.3 for production and 7.6 for area. The average yield per acre for the 25 countries was 20.4 bushels in 1921 as against 15.9 bushels in 1920.

*Barley.*—In 27 countries the total production of barley in 1921 was 677,261,000 bushels from 30,082,000 acres, as against 700,354,000 bushels from 30,794,000 acres in 1920 and 692,651,000 bushels from 30,517,000 acres, the five-year average. As compared with 1920 the acreage in 1921 was 2.3 p.c. less, and as compared with the average it was 1.4 p.c. less; the total yield was 3.3 p.c. less than that of 1920 and 2.2 p.c. less than the average. The average yield per acre was 22.5 bushels as against 22.7 bushels in 1920, and for the five-year average. Adding the seven extra countries, the total production in 1921 for 34 countries amounted to 1,076,746,000 bushels from 48,651,000 acres, as against 1,107,200,000 bushels from 49,730,000 acres in 1920; the acreage was thus 2.2 p.c. and the yield 2.8 p.c. less than in 1920. The average yield per acre was for the 34 countries, 22.1 bushels in 1921 as against 22.3 bushels in 1920.

*Oats.*—In 26 countries the production of oats in 1921 was 2,526,313,000 bushels from 95,274,000 acres, as against 3,079,745,000 bushels from 91,902,000 acres in 1921, and 2,851,385,000 bushels from 88,371,000 acres, the five-year average. The area was 3.7 p.c.

above that of 1920 and 7.8 p.c. above the average, whilst the yield was 18 p.c. below that of 1920 and 11.4 p.c. below the average. The average yield per acre was 26.5 bushels in 1921 as against 33.5 bushels in 1920 and 32.3 bushels, the five-year average. Adding the five extra countries the total yield for the 31 countries was 2,835,487,000 bushels from 105,611,000 acres in 1921, as against 3,320,278,000 bushels from 101,493,000 acres in 1920, the area being 4.1 p.c. more, whilst the yield was 15 p.c. less than in 1920. The average yields per acre were 26.8 bushels in 1921, as compared with 32.7 bushels in 1920.

*Corn.*—Fifteen countries produced 3,283,035,000 bushels from 112,701,000 acres in 1921, as against 3,432,931,000 bushels from 110,698,000 acres in 1920, and 3,421,186,000 bushels from 115,316,000 acres the five-year average. The area was 1.8 p.c. above that of 1920 and 2.3 p.c. below that of the average, the yield was 4.4 p.c. below 1920 and 4 p.c. below the average. The average yield per acre was 29.1 bushels in 1921, as compared with 31 bushels in 1920 and 29.7 bushels the five-year average. Adding the three countries of Hungary, Poland and Czecho-Slovakia, the total production in 1921 for the 18 countries was 3,322,488,000 bushels from 115,213,000 acres in 1921, as compared with 3,493,817,000 bushels from 113,192,000 acres in 1920, the yield being 4.9 p.c. less on an area 1.8 p.c. more. The average yield per acre for the 18 countries was 28.8 bushels, as against 30.9 bushels in 1920. Of the total area under corn in 1921 103,850,000 acres, or 90 p.c., were in the United States.

*Potatoes.*—The yield for 23 countries was 2,539,626,000 bushels from 19,956,000 acres in 1921, as against 2,826,170,000 bushels from 19,310,000 acres in 1920 and 2,525,143,000 bushels from 18,641,000 acres, the five-year average. The acreage in 1921 was 3.3 p.c. above that of 1920 and 7 p.c. above the average; the yield was 10.1 p.c. below that of 1920 and 0.6 p.c. above the average. The yield per acre was 127.3 bushels in 1921, 141.1 bushels in 1920 and 135.4 bushels, the average. Adding the four countries of Hungary, Latvia, Poland and Czecho-Slovakia, the total for the 27 countries was 3,361,556,000 bushels from 27,079,000 acres in 1921, as against 3,764,641,000 bushels from 25,619,000 acres in 1920, the acreage in 1921 being 5.7 more and the yield 10.7 p.c. less. The average yield per acre for the 27 countries is 124.1 bushels, as against 146.9 bushels in 1920.

Countries.	1920. 000 acres.	1921 000 acres.	Average 1915-19. 000 acres.	Per cent of aver- age, 1920. p.c.	Per cent of aver- age, 1920. p.c.	1920. 000 bush.	Average 1915-19. 000 bush.	Per cent of aver- age, 1920. p.c.	Per cent of aver- age, 1920. p.c.	1920. bush. per acre.	1921. bush. per acre.	Average 1915-19. bush. per acre.
<b>Wheat—</b>												
Germany.....	3,398	3,561	3,292	104.8	108.2	82,583	107,800	130.5	130.2	24.3	30.3	25.1
Austria.....	371	406	406	102.1	93.1	5,434	6,452	118.9	110.4	14.6	17.1	14.4
Belgium.....	306	353	287	115.3	122.7	10,275	11,523	112.2	165.1	33.6	32.7	24.3
Bulgaria.....	2,131	2,361	2,327	110.8	101.5	39,705	42,510	107.1	135.1	18.6	18.0	13.5
Denmark.....	180	220	143	122.2	139.4	7,330	11,207	151.6	183.3	41.1	51.3	42.7
Spain.....	10,255	10,386	10,227	101.3	101.6	138,606	145,152	104.7	103.8	13.5	14.0	13.7
Finland.....	19	20	18	102.0	109.7	272	280	103.0	111.4	14.0	14.1	13.9
France.....	12,587	13,171	11,970	104.6	110.0	226,932	322,772	136.2	163.1	18.8	24.5	16.5
Alsace-Lorraine.....	288	304	226	105.7	134.8	5,907	7,703	130.4	204.7	20.5	25.3	16.7
England and Wales.....	1,875	1,976	2,156	105.4	91.7	53,352	69,784	103.8	106.5	28.5	35.5	30.4
Scotland.....	54	65	72	119.9	90.7	2,080	2,568	103.5	92.1	38.2	39.4	38.8
Ireland.....	43	103	103	85.5	41.8	1,397	1,446	103.5	95.6	8.7	11.3	10.9
Greece.....	1,399	988	1,069	70.6	92.5	12,194	11,170	91.6	114.8	12.5	16.4	15.0
Italy.....	11,290	11,780	11,224	104.3	105.0	141,339	192,839	136.4	114.8	16.9	24.6	18.3
Luxemburg.....	27	27	25	101.2	105.5	449	661	147.2	143.1	12.5	16.4	15.0
Norway.....	41	41	26	100.0	157.3	999	941	94.2	147.5	24.7	23.2	24.8
Netherlands.....	152	177	147	116.2	120.4	5,755	8,686	150.7	165.6	38.0	49.2	35.8
Sweden.....	360	360	338	99.9	106.6	10,528	12,377	119.5	142.8	29.2	34.9	23.3
Switzerland.....	119	117	126	98.9	93.5	3,586	3,799	105.9	89.3	30.2	32.4	33.9
Canada.....	18,232	23,261	16,343	127.6	142.3	263,180	300,558	120.4	118.2	14.5	13.0	15.6
United States.....	61,143	62,408	58,549	102.1	106.6	833,027	794,893	95.4	94.9	13.6	12.7	14.3
Guatemala.....	24	21	25	86.7	81.9	312	360	115.4	79.2	13.1	17.4	18.0
British India.....	29,949	25,722	31,142	85.9	82.6	377,888	250,469	66.3	72.0	12.6	9.7	11.2
Algeria.....	3,096	2,816	3,076	91.0	91.6	6,798	33,764	496.7	127.6	2.2	12.0	8.6
Egypt.....	1,190	1,458	1,353	122.5	107.8	31,711	37,011	116.7	110.3	26.6	25.4	24.8
French Morocco.....	1,997	1,469	1,551	73.5	94.7	21,999	17,466	79.4	96.0	11.0	11.9	11.7
Tunis.....	1,319	1,500	1,450	113.7	102.8	5,229	10,623	203.2	132.7	4.0	7.1	5.5
Argentina.....	14,817	13,927	16,464	94.0	84.6	169,757	154,875	91.2	90.6	11.5	11.1	10.4
Chile.....	1,152	1,314	1,227	114.1	107.1	25,180	23,660	94.0	111.6	21.9	18.0	17.3
Uruguay.....	700	845	845	105.9	87.7	12,768	12,125	105.1	147.3	11.1	16.4	9.7
Union of S. Africa.....	823	839	860	102.0	97.6	7,768	8,105	107.1	130.3	9.8	10.4	7.8
Australia.....	9,083	9,405	9,636	103.5	97.6	141,412	136,168	94.3	119.9	15.9	14.5	11.8
New Zealand.....	213	563	253	170.0	143.0	5,974	10,500	176.0	163.0	28.0	29.0	25.5
<b>Totals and Averages (partial).....</b>	<b>188,640</b>	<b>191,572</b>	<b>186,965</b>	<b>101.5</b>	<b>102.5</b>	<b>2,660,132</b>	<b>2,751,330</b>	<b>103.4</b>	<b>105.8</b>	<b>14.1</b>	<b>14.3</b>	<b>13.9</b>



56.---Acreage and Production of Cereals and of Potatoes in Various Countries of the World, 1919 and 1920---continued.

Countries.	1920.		1921.		Average 1915-19.		Per cent of aver- age.		Per cent of aver- age.		1920.		1921.		Aver- age 1915- 19.	
	000 acres.	000 acres.	000 acres.	000 acres.	p.c.	p.c.	000 bush.	000 bush.	p.c.	p.c.	bush. per acre.	bush. per acre.	bush. per acre.	bush. per acre.	000 bush.	000 bush.
<b>Wheat—</b>																
Hungary.....	2,662	2,662	2,662	2,662	101.3	101.3	38,295	47,088	123.0	123.0	14.4	17.5	14.4	17.5	—	—
Latvia.....	39	46	46	46	118.3	118.3	389	784	201.4	201.4	10.0	17.1	10.0	17.1	—	—
Poland.....	1,791	2,982	2,982	2,982	109.3	109.3	18,258	35,982	183.1	183.1	10.2	11.8	10.2	11.8	—	—
Rumania.....	5,077	6,149	6,149	6,149	121.1	121.1	70,350	97,219	138.2	138.2	13.9	15.8	13.9	15.8	—	—
Czecho-Slovakia.....	1,556	1,538	1,538	1,538	98.2	98.2	157,914	197,901	154.3	154.3	16.8	20.4	16.8	20.4	—	—
<b>Grand Totals and Averages.....</b>	<b>199,775</b>	<b>204,984</b>	<b>204,984</b>	<b>204,984</b>	<b>102.6</b>	<b>102.6</b>	<b>2,945,338</b>	<b>3,129,604</b>	<b>106.2</b>	<b>106.2</b>	<b>14.7</b>	<b>15.3</b>	<b>14.7</b>	<b>15.3</b>	<b>—</b>	<b>—</b>
<b>Rye—</b>																
Germany.....	10,589	10,539	10,539	10,539	99.5	99.5	194,258	267,651	137.8	137.8	18.3	25.4	18.3	25.4	22.3	22.3
Austria.....	711	758	758	758	106.7	106.7	10,046	12,661	126.0	126.0	14.1	16.7	14.1	16.7	13.6	13.6
Belgium.....	523	523	523	523	130.8	130.8	18,169	17,761	97.8	97.8	24.2	34.7	24.2	34.7	18.3	18.3
Bulgaria.....	452	489	489	489	104.8	104.8	9,708	8,390	85.6	85.6	14.3	21.7	14.3	21.7	12.5	12.5
Denmark.....	1,799	1,786	1,786	1,786	100.9	100.9	13,242	12,204	100.9	100.9	10.7	23.7	10.7	23.7	21.8	21.8
Spain.....	603	605	605	605	99.2	99.2	27,830	28,118	101.0	101.0	105.8	15.7	105.8	15.7	14.6	14.6
Finland.....	108	108	108	108	102.8	102.8	9,173	10,385	113.2	113.2	105.6	15.2	105.6	15.2	16.7	16.7
France.....	1,108	2,108	2,108	2,108	104.0	104.0	34,492	44,944	129.0	129.0	16.1	20.5	16.1	20.5	15.1	15.1
Alsace-Lorraine.....	131	222	222	222	170.2	170.2	2,258	2,577	114.1	114.1	168.4	20.9	168.4	20.9	23.8	23.8
Greece.....	282	287	287	287	101.5	101.5	1,360	3,151	102.2	102.2	10.4	14.2	10.4	14.2	13.6	13.6
Italy.....	36	36	36	36	101.2	101.2	98.9	97.0	98.9	98.9	17.4	19.7	17.4	19.7	17.1	17.1
Luxembourg.....	36	36	36	36	100.0	100.0	99.4	97.0	99.4	99.4	17.4	24.6	17.4	24.6	20.2	20.2
Norway.....	492	492	492	492	100.0	100.0	99.4	97.0	99.4	99.4	17.4	24.6	17.4	24.6	20.2	20.2
Netherlands.....	914	914	914	914	100.0	100.0	23,055	16,646	116.9	116.9	124.1	28.9	124.1	28.9	33.8	33.8
Sweden.....	57	57	57	57	113.1	113.1	1,622	1,800	101.8	101.8	32.3	30.5	32.3	30.5	27.1	27.1
Switzerland.....	60	60	60	60	98.9	98.9	11,306	11,455	98.9	98.9	31.7	31.7	31.7	31.7	20.6	20.6
Canada.....	4,409	4,228	4,228	4,228	95.9	91.3	60,400	57,918	87.1	87.1	17.5	11.8	17.5	11.8	14.4	14.4
United States.....	3	3	3	3	82.0	41.2	55	38	69.5	69.5	33.9	17.2	33.9	17.2	17.5	17.5
Chile.....																
<b>Totals and Averages (partial).....</b>	<b>24,450</b>	<b>25,628</b>	<b>25,628</b>	<b>25,628</b>	<b>104.6</b>	<b>102.7</b>	<b>437,248</b>	<b>540,298</b>	<b>123.6</b>	<b>114.5</b>	<b>17.9</b>	<b>21.1</b>	<b>17.9</b>	<b>21.1</b>	<b>18.9</b>	<b>18.9</b>
Hungary.....	1,475	1,370	1,370	1,370	92.9	92.9	20,564	22,065	107.4	107.4	13.9	16.1	13.9	16.1	—	—
Latvia.....	456	562	562	562	115.5	115.5	4,686	9,806	209.3	209.3	9.6	17.5	9.6	17.5	—	—
Poland.....	7,236	8,838	8,838	8,838	106.8	106.8	74,842	167,217	94.4	94.4	10.3	18.9	10.3	18.9	—	—
Rumania.....	695	807	807	807	116.1	116.1	11,168	10,539	94.4	94.4	16.1	13.1	16.1	13.1	—	—
Czecho-Slovakia.....	2,224	2,183	2,183	2,183	98.2	98.2	32,942	54,382	165.1	165.1	14.8	24.9	14.8	24.9	—	—
Algeria.....	0.3	0.3	0.3	0.3	100.0	100.0	4	5	125.0	125.0	13.3	16.7	13.3	16.7	—	—
<b>Grand Totals and Averages.....</b>	<b>36,596.3</b>	<b>39,388.2</b>	<b>39,388.2</b>	<b>39,388.2</b>	<b>107.6</b>	<b>107.6</b>	<b>581,454</b>	<b>804,342</b>	<b>128</b>	<b>128</b>	<b>15.9</b>	<b>20.4</b>	<b>15.9</b>	<b>20.4</b>	<b>—</b>	<b>—</b>

Germany.....	2,949	2,808	2,889	95.2	97.2	82,332	89,043	80,821	108.2	110.2	27.9	31.7	28.0
Austria.....	238	267	268	111.8	99.5	4,392	5,200	4,343	118.4	119.7	18.4	19.5	16.2
Belgium.....	545	551	564	101.0	97.6	13,924	13,239	10,265	95.1	129.0	25.5	44.0	44.0
Bulgaria.....	626	727	601	116.1	97.5	27,324	27,324	24,703	110.6	110.6	39.5	37.6	41.1
Denmark.....	4,319	4,335	4,029	100.4	107.6	90,449	89,307	83,965	98.7	106.4	20.9	20.6	20.8
Spain.....	293	297	285	101.3	103.9	4,983	4,988	4,747	99.1	104.0	17.0	16.7	16.6
Finland.....	1,641	1,653	1,612	100.8	102.5	38,377	37,739	34,007	98.5	110.9	23.4	22.9	21.1
France.....	1,118	1,117	1,087	99.2	119.2	3,299	3,606	2,550	109.3	141.4	27.9	30.8	25.9
Alsace-Lorraine.....	1,637	1,436	1,407	87.7	102.0	50,680	42,472	44,657	83.8	95.1	31.0	29.6	31.7
England.....	204	171	162	83.6	106.1	7,784	5,912	5,701	76.0	103.7	38.1	34.6	35.2
Scotland.....	207	176	168	84.8	104.4	7,419	5,867	5,355	79.1	79.8	35.9	33.4	43.8
Ireland.....	494	541	526	109.5	102.9	5,869	10,360	9,318	176.5	111.2	11.9	19.1	17.7
Italy.....	5	5	6	100.8	95.1	105	96	120	92.0	80.0	19.4	17.8	21.1
Luxemburg.....	156	156	125	100.0	125.0	5,381	4,310	4,266	80.1	101.0	34.5	27.7	34.2
Norway.....	56	62	58	109.6	105.9	2,742	3,650	2,587	133.1	141.1	48.7	50.2	44.4
Netherlands.....	402	400	427	99.7	93.6	11,010	12,324	12,656	111.9	97.4	27.4	30.8	29.6
Sweden.....	18	16	19	91.7	88.2	620	552	687	89.0	86.7	34.8	33.9	34.4
Switzerland.....	18	16	19	91.7	88.2	620	552	687	89.0	86.7	34.8	33.9	34.4
Canada.....	2,552	2,796	2,343	109.6	119.4	63,311	59,709	57,104	94.3	104.6	24.8	21.3	24.4
United States.....	7,600	7,240	8,060	95.3	89.8	180,302	151,157	205,314	79.8	73.6	24.9	20.9	25.5
Argentina.....	2,795	2,508	2,914	80.7	86.1	20,928	48,219	37,160	161.1	129.8	10.7	19.2	12.8
Egypt.....	340	374	418	100.8	89.3	10,447	11,369	12,091	108.8	94.0	30.7	30.4	28.9
French Morocco.....	2,341	1,905	2,034	81.4	83.7	38,639	29,505	30,988	74.4	95.2	16.9	15.5	15.2
Tunis.....	937	1,230	1,116	132.7	101.7	2,617	11,481	8,376	438.6	137.1	2.8	9.3	6.9
Chile.....	139	128	116	91.7	110.1	5,385	4,508	3,972	83.7	113.5	38.7	35.3	34.3
Uruguay.....	11	5	8	45.5	67.7	169	94	96	55.7	97.9	15.9	18.4	12.6
Union of South Africa.....	91	87	93	95.2	93.4	1,137	1,281	1,314	112.7	97.5	12.5	14.8	14.2
Totals and Averages (partial)													
Hungary.....	1,266	1,187	22,582	93.7	98.6	700,354	677,261	692,651	96.7	97.8	22.7	22.5	22.7
Latvia.....	306	362	118.3	93.7	-	22,582	20,589	-	91.2	-	17.8	17.3	-
Poland.....	1,944	2,430	3,054	118.3	-	3,054	6,495	-	212.7	-	10.0	18.0	-
Rumania.....	3,307	3,875	39,303	116.9	-	39,303	53,298	-	123.0	-	20.2	21.9	-
Czecho-Slovakia.....	1,711	1,583	63,193	117.2	-	63,193	64,941	-	102.8	-	19.1	16.8	-
Japan.....	2,987	2,929	37,232	92.5	-	37,232	47,357	-	127.2	-	21.8	29.9	-
India.....	7,415	6,203	92,126	98.0	-	92,126	89,884	-	97.6	-	30.8	30.6	-
Grand Totals and Averages													
Oats.....	49,730	48,651	1,107,200	97.8	-	1,107,200	1,076,846	-	97.2	-	22.3	22.1	-
Germany.....	7,905	7,814	7,433	98.4	104.8	312,935	324,533	287,733	103.7	112.8	39.6	41.5	38.6
Austria.....	627	664	709	105.9	93.6	15,035	17,671	14,223	117.5	124.2	24.0	26.6	20.1
Belgium.....	586	603	501	102.9	107.4	31,873	28,472	17,476	89.3	162.9	54.4	47.2	31.2
Bulgaria.....	332	407	342	122.6	119.1	9,529	10,609	6,236	111.3	170.1	28.7	26.1	18.2
Denmark.....	1,091	1,112	996	101.9	102.4	47,806	48,986	43,448	102.4	112.7	43.8	44.0	43.6
Spain.....	1,588	1,576	1,480	99.2	107.9	35,551	33,521	31,165	94.3	107.6	22.4	21.3	21.3
Finland.....	1,013	1,038	980	100.2	105.9	23,116	26,380	23,734	114.1	111.1	22.8	25.4	27.5
France.....	8,279	8,298	7,505	100.2	100.3	274,207	230,735	208,883	84.1	110.5	33.1	27.8	27.5
Alsace-Lorraine.....	252	252	210	99.7	119.7	8,202	7,012	5,921	85.5	118.4	27.9	27.9	27.9
England.....	2,266	2,147	2,355	94.8	91.2	85,908	80,176	105,381	93.3	76.1	37.9	37.3	44.7



	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1011	1010	1009	1008	1007	1006	1005	1004	1003	1002	1001	1000	999	998	997	996	995	994	993	992	991	990	989	988	987	986	985	984	983	982	981	980	979	978	977	976	975	974	973	972	971	970	969	968	967	966	965	964	963	962	961	960	959	958	957	956	955	954	953	952	951	950	949	948	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931	930	929	928	927	926	925	924	923	922	921	920	919	918	917	916	915	914	913	912	911	910	909	908	907	906	905	904	903	902	901	900	899	898	897	896	895	894	893	892	891	890	889	888	887	886	885	884	883	882	881	880	879	878	877	876	875	874	873	872	871	870	869	868	867	866	865	864	863	862	861	860	859	858	857	856	855	854	853	852	851	850	849	848	847	846	845	844	843	842	841	840	839	838	837	836	835	834	833	832	831	830	829	828	827	826	825	824	823	822	821	820	819	818	817	816	815	814	813	812	811	810	809	808	807	806	805	804	803	802	801	800	799	798	797	796	795	794	793	792	791	790	789	788	787	786	785	784	783	782	781	780	779	778	777	776	775	774	773	772	771	770	769	768	767	766	765	764	763	762	761	760	759	758	757	756	755	754	753	752	751	750	749	748	747	746	745	744	743	742	741	740	739	738	737	736	735	734	733	732	731	730	729	728	727	726	725	724	723	722	721	720	719	718	717	716	715	714	713	712	711	710	709	708	707	706	705	704	703	702	701	700	699	698	697	696	695	694	693	692	691	690	689	688	687	686	685	684	683	682	681	680	679	678	677	676	675	674	673	672	671	670	669	668	667	666	665	664	663	662	661	660	659	658	657	656	655	654	653	652	651	650	649	648	647	646	645	644	643	642	641	640	639	638	637	636	635	634	633	632	631	630	629	628	627	626	625	624	623	622	621	620	619	618	617	616	61
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**World's Statistics of Farm Live Stock.**—Table 57 shows the numbers of farm live stock (horses, mules, asses, cattle, sheep, goats and swine) in the principal countries of the world, as derived from the International Year Book of Agricultural Statistics, 1909-1921, which was issued in 1922 by the International Institute of Agriculture. In this table a distinction is made between countries of the British Empire and those of the rest of the world. The numbers are compared for the two dates of 1911 or nearest year and 1921 or nearest year. The letter *E* signifies an annual or other estimate, and the letter *C* stands for Census. For countries whose boundaries have been affected by the war, the numbers of live stock for the second of the two periods do not relate to the same territories as for the first period. Where this is so the fact is indicated by printing the names of the countries in italics. For these countries the increase or decrease shown may be due rather to the alteration of territory than to actual change, and it is not possible to distinguish between the two causes. Where the data are incomplete, or where the figures for the two years are not comparable for reasons other than alteration of territorial boundary, the figures are printed in italics and are not included in the totals.

In Table 58 the totals for the British Empire are compared for the two periods, and the proportion that each description bears to the world's total is also shown. The list of countries in the British Empire is much more complete than that given in the similar table appearing on pp. 269-271 in the Canada Year Book of 1920. It includes not only India and the large self-governing Dominions, but also the great majority of the Crown Colonies and other British Possessions in various parts of the world. It will be noticed that horses, asses and cattle show increases of 14.2, 12.6 and 23.1 p.c. respectively, but that the other descriptions show decreases, mules of 18, sheep of 11.4, goats of 23.4 and swine of 6.3 p.c. For horses the British Empire is shown to possess 10.2, for asses 24.1, for mules 3.2, for cattle 37.8, for sheep 44.9, for goats 58.3, and for swine 6.2 p.c. of the totals for the world, so far as data are available to give approximate comparisons for the two periods.

Table 59 gives the world's totals for each description of live stock for the two periods. According to this table the world's totals have increased in the case of asses by 7.1, mules by 19.6, and cattle by 5.7 p.c., whilst decreases have occurred in the numbers of horses by 11.8, of sheep by 16.6, of goats by 13.5, and of swine by 11.4 p.c.

In addition to the ordinary descriptions of farm live stock, the International Year Book shows that buffaloes are maintained in 17 countries, the largest numbers being in India 21,421,993 (1921), Siam 2,508,164 (1920), Egypt 645,537 (1921), the Philippine Isles 1,388,244 (1919), and the Dutch East Indies 3,273,696 (1918). Of camels maintained in 19 countries, the largest numbers are in India, 549,351 (1920), French West Africa 102,367 (1921), Kenya 103,152 (1920), Egypt 145,008 (1921), Algeria 197,216 (1915), Morocco 86,000 (1921), Tunis 170,606 (1919), and Italian Somaliland 2,101,178 (1920).

## 57.—Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921.

(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.		Date nearest 1921.		Increase (+) or decrease (—).
	Actual date.	No.	Actual date.	No.	
<b>Horses—</b>					
United Kingdom.....	1911	E 2,253,229	1921	E 2,164,805	—88,424
Canada.....	1911	C 2,595,912	1921	E 3,813,921	+1,218,009
Newfoundland.....	1911	C 13,288	—	—	—
Jamaica.....	1911	E 59,496	1917	C 49,624	—9,872
Barbados.....	1911	E 2,541	1919	E 2,362	—179
Trinidad and Tobago.....	1911	E 4,878	1920	E 4,155	—723
British Guiana.....	1911	E 2,655	1920	E 950	—1,705
Falkland Isles.....	1911	E 3,554	1919	E 3,242	—312
Cyprus.....	1911	E 68,740 <sup>1</sup>	1921	E 4,368	—
India Brit. Prov.....	1911	E 1,564,935	1920	C 1,698,940	+134,005
India Native States.....	1911	E 147,953	1920	E 277,383	+129,430
Ceylon.....	1911	E 4,815	1919	E 3,600	—1,215
Straits Settlements.....	1911	E 2,950	1919	E 1,508	—1,442
Union of South Africa.....	1911	C 719,414	1920	E 690,124 <sup>2</sup>	—29,290
Rhodesia South <sup>3</sup> .....	1911	C 2,333	1920	E 2,891	+558
Mauritius <sup>4</sup> .....	1911	E 600	1920	E 777	+177
Australia.....	1911	C 2,278,225	1919	E 2,421,201	+142,976
New Zealand.....	1911	E 404,284	1921	E 337,259	—67,025
Fiji Isles <sup>5</sup> .....	1911	E 6,288 <sup>1</sup>	1920	E 9,812 <sup>1</sup>	+3,524
<b>Total British Empire.....</b>	—	— 10,054,062	—	— 11,482,554	+1,428,492
<i>Austria.....</i>	1910	C 1,802,848	—	—	—
<i>Belgium.....</i>	1911	E 261,967	1921	E 222,055	—39,912
<i>Bulgaria.....</i>	1910	C 118,488	—	—	—
<i>Czecho-Slovakia.....</i>	—	—	1920	E 581,267	—
<i>Denmark.....</i>	1909	E 535,018	1921	E 597,988	+62,970
<i>Estonia<sup>6</sup>.....</i>	—	—	1920	E 164,502	—
<i>Finland<sup>6</sup>.....</i>	1911	E 297,648	1919	E 273,281	—24,367
<i>France.....</i>	1911	E 3,236,110	1920	E 2,635,350	—600,760
<i>Germany.....</i>	1912	C 4,523,059	1921	E 3,683,343 <sup>7</sup>	—839,716
<i>Greece.....</i>	1911	C 148,929	1920	E 200,802	+51,873
<i>Holland.....</i>	1910	C 327,377	1921	C 363,668	+36,291
<i>Hungary.....</i>	1911	C 2,351,481	1920	E 717,700	—1,633,781
<i>Italy.....</i>	1914	E 2,255,000 <sup>1</sup>	1918	C 989,786 <sup>8</sup>	—
<i>Latvia.....</i>	—	—	1921	E 282,500	—
<i>Luxembourg.....</i>	1910	C 18,625	1919	C 17,652	—973
<i>Norway.....</i>	1910	E 167,714 <sup>9</sup>	1918	C 221,062	+53,348
<i>Poland.....</i>	—	—	1920	C 3,187,415	—
<i>Rumania.....</i>	1911	E 824,714	1920	E 1,485,200	+660,486
<i>Russia in Europe.....</i>	1911	F 24,795,241	1920	C 17,717,539	—7,077,702
<i>Russia in Asia.....</i>	1911	E 9,759,691	1920	C 6,905,168 <sup>10</sup>	—2,854,523
<i>Serb-Croat-Slovene State.....</i>	1910	C 152,523	1921	C 1,059,285	+906,762
<i>Spain.....</i>	1911	E 546,035	1919	E 594,351	+48,316
<i>Sweden.....</i>	1911	E 588,485	1919	E 715,681	+127,196
<i>Switzerland.....</i>	1911	C 144,128	1921	C 133,847	—10,281
<i>United States.....</i>	1911	E 20,277,000	1921	E 19,208,000	—1,069,000
<i>Porto Rico.....</i>	1910	C 58,000	—	—	—
<i>Argentina.....</i>	1911	E 8,894,031	1917	E 8,823,237	—70,794
<i>Bolivia.....</i>	1910	E 96,846	—	—	—
<i>Brazil.....</i>	1912	C 7,289,690	1916	C 6,065,230	—1,224,460
<i>Chile.....</i>	1911	E 352,108	1919	E 391,713	+39,610
<i>Colombia.....</i>	—	—	1915	C 526,191	—
<i>Costa Rica.....</i>	1910	C 60,114	1915	E 64,717	+4,603
<i>Cuba.....</i>	1911	E 457,279	1918	E 779,496	+322,217
<i>Guatemala.....</i>	1913	E 63,704	1915	E 116,876 <sup>11</sup>	—
<i>Honduras.....</i>	1910	E 64,430	1914	E 68,059	+3,629
<i>Mexico.....</i>	—	—	1920	E 929,585	—
<i>Paraguay.....</i>	1915	E 478,000	1918	E 490,000	+12,000
<i>Uruguay.....</i>	—	—	1916	C 554,871	—
<i>Venezuela.....</i>	1918	E 156,910	1920	E 167,708	+10,798
<i>China<sup>10</sup>.....</i>	1914	E 4,934,226	1916	E 4,400,663	—
<i>Japan.....</i>	1911	E 1,576,146	1919	E 1,479,682	—96,464
<i>Korea.....</i>	1911	E 40,976	1920	E 54,521	+13,545
<i>Kuantung.....</i>	1911	E 3,973	1918	E 4,079	+106

<sup>1</sup>Including asses and mules. <sup>2</sup>Not including horses in towns, on Native Reserves or on land in Native occupation. <sup>3</sup>Horses belonging to Europeans only. <sup>4</sup>Horses on sugar plantations. <sup>5</sup>Not including district of Petseri. <sup>6</sup>Horses over three years old. <sup>7</sup>Provisional data and not including army horses. <sup>8</sup>Not including occupied territory. <sup>9</sup>Rural districts only. <sup>10</sup>Partial data. <sup>11</sup>Including mules.

**57.—Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—continued.**

(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.			Date nearest 1921.			Increase (+) or decrease (-).
	Actual date.	No.		Actual date.	No.		
<b>Horses—con.</b>							
Philippines.....	1911	E	146,641	1919	E	255,380	+108,739
Siam.....	-	-	-	1920	E	132,675	-
Algeria.....	1911	E	226,764	1915	E	195,633	-31,131
Egypt <sup>2</sup> .....	1911	E	50,675	1921	E	33,609	-17,066
French Morocco.....	1915	E	122,870 <sup>1</sup>	1921	E	65,000	-
Total.....	-	-	88,753,482	-	-	75,625,041	-13,128,441
<b>Total Horses.....</b>	-	-	<b>98,807,544</b>	-	-	<b>87,107,595</b>	<b>-11,699,949</b>
<b>Asses—</b>							
Malta.....	1911	E	2,909	1920	E	4,545	+1,636
Barbados.....	1911	E	4,729	1919	E	9,542	+4,813
British Guiana.....	1911	E	5,370	1920	E	7,110	+1,740
Trinidad and Tobago.....	1915	E	10,366	1920	E	7,790	-2,576
Cyprus.....	-	-	-	1921	E	51,154	-
India Brit. Prov.....	1911	E	1,342,274	1920	C	1,371,982	+29,708
India Native States.....	1911	E	166,427	1920	E	177,858	+11,431
Bechuanaland.....	1911	C	2,590	1921	E	6,206	+3,616
Kenya.....	-	-	-	1920	E	32,492	-
Rhodesia South.....	1911	C	17,772	1914	E	16,897	-875
Swaziland.....	1915	E	1,550	1920	E	1,600	+50
Union of South Africa.....	1911	E	336,710	1920	E	523,550	+186,840
Australia.....	1911	E	6,272	1919	E	9,221	+2,949
New Zealand.....	1911	E	404	1921	E	245	-159
Papua.....	1911	E	121	1920	E	50	-71
Total British Empire.....	-	-	1,897,494	-	-	2,136,596	+239,102
Austria.....	1910	C	52,801	-	-	-	-
Belgium.....	1910	C	10,549 <sup>1</sup>	-	-	-	-
Bulgaria.....	1910	C	118,488	-	-	-	-
France.....	1911	E	360,590	1920	E	298,180	-62,410
Germany.....	1912	C	11,266	1921	E	5,576 <sup>3</sup>	-5,690
Greece.....	1911	C	132,811	1920	E	364,237 <sup>1</sup>	-
Hungary.....	1911	E	20,093	-	-	-	-
Italy.....	-	-	-	1918	C	949,162 <sup>4</sup>	-
Rumania <sup>1</sup> .....	1911	E	4,248	1920	E	11,719	-
Russia in Europe.....	1911	E	2,900 <sup>5</sup>	1916	C	9,776 <sup>4</sup>	-
Russia in Asia.....	-	-	-	1916	C	54,955 <sup>5</sup>	-
Serb-Croat-Slovene State.....	1910	C	1,011	1921	C	82,041	+81,030
Spain.....	1911	E	836,741	1919	E	1,014,021	+177,280
Switzerland.....	1911	C	1,566	1921	C	886	-680
Porto Rico.....	1910	E	1,000	-	-	-	-
Argentina.....	1911	E	319,315	1917	E	275,688	-43,627
Bolivia.....	1910	E	172,959	-	-	-	-
Brazil <sup>1</sup> .....	1912	C	3,207,940	1916	C	3,221,910	+13,970
Chile.....	1911	E	32,642	1919	E	36,489	+3,847
Colombia.....	-	-	-	1915	C	138,681	-
Curacao.....	1911	E	5,328	1920	E	3,682	-1,646
Dutch Guiana.....	1911	E	446	1919	E	587	+141
Cuba.....	1911	E	1,886	1916	E	3,005	+1,119
Honduras.....	1910	E	2,373	-	-	-	-
Mexico.....	-	-	-	1920	E	287,989	-
Paraguay.....	1915	E	18,000	1918	E	19,800	+1,800
Uruguay.....	-	-	-	1916	C	3,127	-
Venezuela.....	-	-	-	1920	E	200,459	-
China <sup>6</sup> .....	-	-	-	1916	E	3,659,640	-
Korea.....	1911	E	9,823	1920	E	10,444	+621
Algeria.....	1911	E	279,315	1915	E	268,913	-10,402
Egypt.....	1911	E	653,981	1921	E	622,579	-31,402
Latvia.....	1910	C	59,079	-	-	-	-
French Morocco.....	1915	E	225,731	1921	E	420,000	+194,269
Total.....	-	-	5,965,581	-	-	6,283,801	+318,220
<b>Total Asses.....</b>	-	-	<b>7,863,075</b>	-	-	<b>8,420,397</b>	<b>+557,322</b>

<sup>1</sup>Including mules. <sup>2</sup>Not including horses of English army. <sup>3</sup>Provisional data. <sup>4</sup>Not including occupied territory. <sup>5</sup>Not including Northern Caucasias. <sup>6</sup>Partial data.

**57.—Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—continued.**
*(Italics indicate incomparability of data at the two periods.)*

Countries.	Date nearest 1911.		Date nearest 1921.		Increase (+) or decrease (-).
	Actual date.	No.	Actual date.	No.	
<b>Mules</b>					
Malta.....	1911	E	—	—	—
Canada.....	—	—	1921	E	10,424
Barbados.....	1911	E	—	—	—
Trinidad and Tobago.....	1910	E	1914	E	4,769
British Guiana.....	1913	E	1920	E	2,105
India Brit. Prov.....	1911	E	1920	E	74,698
Union of South Africa.....	1911	C	1919	E	92,795 <sup>1</sup>
Australia.....	1910	E	1919	E	3,908
Total British Empire.....	—	—	—	—	174,367
Austria.....	1910	C	—	—	—
Bulgaria.....	1910	C	—	—	—
France.....	1911	E	1920	E	80,600
Germany.....	1912	C	1921	E	27,323 <sup>2</sup>
Greece.....	1911	C	1918	E	111,979
Hungary.....	1911	C	—	—	—
Italy.....	—	—	1918	C	496,743 <sup>4</sup>
Russia in Europe.....	1911	E	1916	C	1,520 <sup>4</sup>
Spain.....	1911	E	1919	E	1,069,408
Switzerland.....	1911	E	1921	C	3,832
United States.....	1911	E	1921	E	5,427,000
Porto Rico.....	1910	C	—	—	—
Hawaii.....	1910	C	1920	C	10,542
Argentina.....	1911	E	1917	E	595,194
Bolivia.....	1910	E	—	—	—
Chile.....	1911	E	1919	E	51,411
Colombia.....	—	—	1915	C	200,921
Costa Rica.....	1910	C	1914	C	2,469
Cuba.....	1911	E	1918	E	64,570
Guatemala.....	1913	E	—	—	—
Honduras.....	1910	E	—	—	—
Uruguay.....	—	—	1916	C	14,410
Venezuela.....	—	—	1920	E	54,565
Korea.....	1911	E	1920	E	2,167
Algeria.....	1911	E	1915	E	174,383
Egypt.....	1911	E	1921	E	19,135
French Morocco.....	—	—	1911	E	54,000
Tunis.....	1911	E	1919	E	31,324
Cape Verde Isles.....	—	—	1916	E	1,056
Total.....	—	—	—	—	7,671,337
<b>Total Mules.....</b>	—	—	—	—	<b>7,845,704</b>
<b>Cattle—</b>					
United Kingdom.....	1911	E	1921	E	11,892,951
Malta.....	1911	E	1920	E	3,183
Canada.....	1911	C	1921	E	10,206,205
Newfoundland.....	1911	C	—	—	—
Bermuda.....	1911	C	—	—	—
Bahamas.....	1911	E	1918	E	1,554
Jamaica.....	1911	E	1919	E	169,740
Cayman Isles.....	1911	E	1919	E	1,400
Grenada.....	1911	C	—	—	—
Trinidad and Tobago.....	1911	E	1920	E	10,448
British Guiana <sup>5</sup> .....	1911	E	1920	E	85,940
Falkland Isles.....	1911	E	1919	E	6,794
Cyprus.....	1911	E	1921	E	51,536
India Brit. Prov. <sup>7</sup> .....	1911	E	1920	C	127,119,492
India Native States <sup>7</sup> .....	1911	E	1920	E	16,400,043
Ceylon <sup>8</sup> .....	1911	E	1919	E	1,599,000
Straits Settlements.....	1911	E	1919	E	66,681
Hong Kong.....	1911	E	1919	E	1,567
Union of South Africa.....	1911	C	1920	E	5,974,802
Basutoland.....	1911	E	—	—	—

<sup>1</sup>Not including mules in towns, on Native Reserves or on land in Native occupation. <sup>2</sup>Not including Queensland. <sup>3</sup>Provisional data. <sup>4</sup>Not including occupied territory. <sup>5</sup>Not including Northern Caucasus. <sup>6</sup>Not including about 30,000 oxen on the savannahs of the interior. <sup>7</sup>Including young buffaloes including buffaloes.



### 57. Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—continued.

(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.		Date nearest 1921.		Increase (+) or decrease (-).
	Actual date.	No.	Actual date.	No.	
<b>Cattle—con.</b>					
Swaziland.....	1911	E 57,601	1920	E 230,000	+172,399
Bechuanaland.....	1911	E 323,911	1921	E 426,344	+102,433
Rhodesia South.....	1911	C 463,923	1920	E 1,517,293	+1,053,370
Nyasaland <sup>1</sup> .....	1911	E 59,758	1918	E 80,338	+20,580
Uganda <sup>2</sup> .....	1911	E 516,139	1919	E 575,200	+59,061
Zanzibar.....	1913	E 11,075	1916	E 11,000	-75
Kenya.....	—	—	1920	E 2,669,065	—
Mauritius <sup>3</sup> .....	1911	E 17,350	1920	E 16,910	-440
Gold Coast.....	—	—	1920	E 68,500	—
Australia.....	1911	E 11,828,954	1919	E 12,711,067	+882,113
New Zealand.....	1911	E 2,020,171	1921	E 3,139,223	+1,119,052
Fiji Isles.....	1911	E 45,000	1920	E 57,463	+12,463
Total British Empire.....	—	— 156,220,984	—	— 192,356,174	+36,135,190
Austria.....	1910	C 9,160,009	1920	E 2,113,692	-7,046,317
Belgium.....	1911	E 1,812,191	1921	E 1,514,953	-297,238
Bulgaria.....	1911	E 866,143	1920	E 854,442	-11,701
Czecho-Slovakia.....	—	—	1920	E 4,212,854	—
Denmark.....	1909	E 2,253,982	1921	E 2,590,903	+336,921
Iceland.....	1911	E 25,982	1920	E 142,668	+116,686
Finland <sup>4</sup> .....	1911	E 1,187,974	1919	E 1,100,986	-86,988
France.....	1911	E 14,435,530	1920	E 13,217,240	-1,218,290
Germany.....	1912	C 20,182,021	1921	E 16,839,559 <sup>5</sup>	-3,342,462
Greece.....	1911	C 298,362	1920	E 659,398	+361,036
Holland.....	1910	C 2,026,943	1921	C 2,062,771	+35,828
Hungary.....	1911	C 7,163,734	1920	E 2,148,000	-5,015,734
Italy.....	—	—	1918	C 6,259,741	—
Latvia.....	—	—	1921	E 779,500	—
Luxemburg.....	1910	C 94,183	1919	C 88,837	-5,346
Norway.....	1910	E 1,133,613 <sup>7</sup>	1918	C 1,049,642	-83,971
Poland.....	—	—	1921	C 7,860,547	—
Rumania.....	1911	E 2,666,945 <sup>8</sup>	1920	E 4,729,766	+2,062,821
Russia in Europe.....	1911	E 37,317,182	1920	C 28,382,628	-8,934,554
Russia in Asia.....	1911	E 14,305,235	1920	C 9,490,414 <sup>9</sup>	-4,814,821
Serb-Croat-Slovene States.....	1910	C 957,105	1921	C 4,833,885	+3,876,780
Spain.....	1911	E 2,541,112	1919	E 3,396,573	+855,461
Portugal.....	—	—	1920	E 740,693	—
Sweden.....	1911	E 2,689,609	1919	E 2,550,328	-138,781
Switzerland.....	1911	C 1,443,483	1921	C 1,424,856	-18,627
United States.....	1911	E 60,502,000	1921	E 65,587,000	+5,085,000
Argentina.....	1911	E 28,786,168	1920	E 27,392,126	-1,394,042
Bolivia.....	1910	E 754,266	—	—	—
Brazil.....	1912	C 30,705,400	1916	C 28,962,180	-1,743,220
Chile.....	1911	E 1,640,322	1919	E 2,163,141	+522,819
Colombia.....	—	—	1915	C 5,034,504	—
Costa Rica.....	1910	C 333,017	1915	E 347,475	+14,458
Cuba.....	1911	E 2,329,423	1918	E 3,965,600	+1,636,177
Guatemala.....	1913	E 556,843	1915	E 619,895	+63,052
Honduras.....	1910	E 466,215	1914	E 489,185	+22,970
Mexico.....	—	—	1920	E 2,162,984	—
Paraguay.....	—	—	1918	E 5,500,000	—
Peru.....	—	—	1917	E 1,000,000	—
Porto Rico.....	1910	C 316,600	—	—	—
Uruguay.....	—	—	1916	C 7,802,442	—
Venezuela.....	—	—	1920	E 2,077,684	—
China <sup>1</sup> .....	—	—	1916	E 15,973,579 <sup>9</sup>	—
Japan.....	1911	E 1,405,026	1919	E 1,344,865	-60,161
Korea.....	1911	E 906,057	1920	E 1,489,797	+583,740
Formosa <sup>10</sup> .....	1911	E 169,614	1919	E 112,990	-56,624
Kwantung.....	1911	E 30,804	1918	E 35,145	+4,341
Saghalin (Japanese).....	1911	E 1,154	1918	E 1,446	+292
Philippines.....	—	—	1919	E 678,525	+678,525
Siam.....	1913	E 2,539,786 <sup>11</sup>	1920	E 2,620,682	+80,896
Algeria.....	1911	E 1,113,952	1921	E 3,313,059	+2,199,107

<sup>1</sup>Not including animals in towns, on Native Reserves or on land in Native occupation. <sup>2</sup>Not including cattle in certain provinces. <sup>3</sup>Cattle on sugar plantations. <sup>4</sup>Cattle over two years old. <sup>5</sup>Provisional data. <sup>6</sup>Not including comparative territory. <sup>7</sup>Total, exports only. <sup>8</sup>In living, but not in breeding, stock. <sup>9</sup>Partial data. <sup>10</sup>Zebu and crossed and imported cattle. <sup>11</sup>Data for 17 out of 18 provinces and excluding four districts.

## 57.—Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—continued.

(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.			Date nearest 1921.			Increase (+) or decrease (—).
	Actual date.		No.	Actual date.		No.	
<b>Cattle—concluded.</b>							
Egypt.....	1911	E	656,166	1921	E	595,964	—60,202
Madagascar.....	1911	E	4,573,370	1920	C	7,518,657	+2,945,287
Mozambique.....	1911	E	17,770	1916	E	37,591	+19,821
Italian Somaliland.....	—	—	—	1920	C	1,246,461	—
Tunis.....	1911	E	191,450	1919	C	634,823	+443,373
Total.....	—	—	257,235,920	—	—	244,481,803	—12,754,117
<b>Total Cattle.....</b>	—	—	<b>413,456,904</b>	—	—	<b>436,837,977</b>	<b>+23,381,073</b>
<b>Sheep—</b>							
United Kingdom.....	1911	E	30,479,807	1921	E	24,273,649	—6,206,158
Malta.....	1911	E	17,653	1920	E	17,853	+200
Canada.....	1911	C	2,175,302	1921	E	3,675,860	+1,500,558
Newfoundland.....	1911	C	75,439	—	—	—	—
Bahamas.....	1911	E	10,412	1918	E	13,848	+3,436
Jamaica.....	1911	E	12,373	1917	C	11,910	—463
British Guiana.....	1911	E	19,160	1920	E	21,200	+2,040
Falkland Isles.....	1911	E	706,170	1919	E	645,738	—60,432
Cyprus.....	1911	E	294,456	1921	E	266,141	—28,315
India Brit. Prov.....	1911	E	23,280,662	1920	C	21,983,573	—1,297,089
India Native States.....	1911	E	8,429,631	1920	E	12,722,785	+4,293,154
Ceylon.....	1911	E	90,394	1919	E	68,000	—22,394
Straits Settlements.....	1911	E	29,471	1919	E	27,179	—2,292
Union of South Africa.....	1911	C	30,656,659	1920	E	26,288,960 <sup>2</sup>	—4,367,699
Basutoland.....	1911	C	1,368,999	—	—	—	—
Beechuanaland.....	1911	C	358,336 <sup>1</sup>	1921	C	120,186 <sup>3</sup>	—
Rhodesia South.....	1911	C	292,372	1917	E	367,818	+75,446
Nyasaland.....	1911	E	22,131	1918	E	40,369	+18,238
Uganda <sup>4</sup> .....	1911	E	521,859 <sup>5</sup>	1919	E	288,200	—233,659
Kenya.....	—	—	—	1920	E	2,683,405	—
(Protectorate of Southwest Africa).....	1911	E	413,449	—	—	—	—
Gold Coast.....	—	—	—	1920	E	153,000 <sup>1</sup>	—
Australia.....	1911	E	93,003,521	1919	E	75,554,082	—17,449,439
New Zealand.....	1911	E	23,996,126	1921	E	23,285,031	—711,095
Fiji Isles <sup>6</sup> .....	1911	E	4,561	1920	E	1,246	—3,315
<b>Total British Empire.....</b>	—	—	<b>214,042,720</b>	—	—	<b>189,553,442</b>	<b>—24,489,278</b>
Austria.....	1910	C	2,428,101	1921	E	368,361	—2,059,740
Belgium.....	1910	C	185,373	—	—	—	—
Bulgaria.....	1910	C	8,669,260	—	—	—	—
Czecho-Slovakia.....	—	—	—	1920	E	975,899	—
Denmark.....	1909	E	726,879	1921	E	521,932	—204,947
Faroë Isles.....	1909	C	99,900	1919	C	68,628	—31,272
Iceland.....	1911	E	574,053	1919	E	583,014	+8,961
Estonia <sup>7</sup> .....	—	—	—	1920	E	530,291	—
Finland.....	1910	C	1,329,692	1918	C	815,391	—514,301
France <sup>8</sup> .....	1911	E	16,425,330	1920	E	9,405,870	—7,019,460
Germany.....	1912	C	5,803,445	1921	E	5,882,272 <sup>9</sup>	+78,827
Greece.....	1911	C	3,545,442	1920	E	5,811,418	+2,265,976
Holland.....	1910	C	889,036	1921	C	668,211	—220,825
Hungary.....	1911	C	8,548,204	1920	E	1,817,000	—6,731,204
Italy.....	—	—	—	1918	C	11,753,910	—
Latvia.....	1914	C	15,075	1920	E	17,853	+2,778
Luxemburg.....	1910	E	5,580	1919	C	4,553	—1,027
Norway.....	1910	E	1,398,383 <sup>10</sup>	1918	C	1,207,923	—190,460
Poland.....	—	—	—	1921	C	2,093,084	—
Portugal.....	—	—	—	1920	E	3,850,733	—
Rumania.....	1911	E	5,269,493	1920	E	8,689,996	+3,420,503
Russia in Europe.....	1911	E	35,788,702 <sup>1</sup>	1920	C	36,065,095	+276,393
Russia in Asia.....	1911	E	32,542,773 <sup>1</sup>	1920	C	14,477,988 <sup>11</sup>	—

<sup>1</sup>Including goats. <sup>2</sup>Not including animals in towns, on Native Reserves, or on land in Native occupation. <sup>3</sup>Animals belonging to Natives only. <sup>4</sup>Not including animals in certain provinces. <sup>5</sup>Including goats in certain districts. <sup>6</sup>Animals belonging to Europeans only. <sup>7</sup>Not including district of Petseri. <sup>8</sup>Provisional data. <sup>9</sup>Rams, sheep and goats over one year old. <sup>10</sup>Rural districts only.

<sup>11</sup>Partial data.

**57.—Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—continued.**

(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.		Date nearest 1921.		Increase (+) or decrease (—).
	Actual date.	No.	Actual date.	No.	
<b>Sheep—concluded.</b>					
<i>Serb-Croat-Slovene States</i> .....	1910	C 3,818,957	1921	C 6,772,960	+2,954,003
Spain.....	1911	E 15,725,882	1919	E 19,337,447	+3,611,565
Sweden.....	1911	E 945,709	1919	E 1,563,654	+617,945
Switzerland.....	1911	C 161,414	1921	C 244,435	+83,021
Turkey in Asia <sup>1</sup> .....	1911	E 25,435,223	—	—	—
United States.....	1911	E 53,633,000	1921	E 37,452,000	-16,181,000
Argentina.....	1911	E 80,401,486	1920	E 45,309,419	-35,092,067
Bolivia.....	1910	E 1,449,114	—	—	—
Brazil.....	1912	E 10,549,930	1916	E 7,204,920	-3,345,010
Chile.....	1911	E 3,537,728	1919	E 4,500,190	+962,462
Curacao.....	1911	E 22,021	1920	E 19,809	-2,212
Guatemala.....	1913	E 513,650	1915	E 383,124	-130,526
Mexico.....	—	—	1920	E 1,089,976	—
Paraguay.....	—	—	1918	E 600,000	—
Peru.....	—	—	1917	E 6,900,000 <sup>2</sup>	—
Uruguay.....	—	—	1916	C 11,472,852	—
Venezuela.....	—	—	1920	E 113,439	—
China.....	—	—	1916	E 22,232,168 <sup>3</sup>	—
Japan.....	1911	E 3,736	1919	E 5,098	+1,362
Kuantung.....	1911	E 11,617	1918	E 1,287	-10,330
Philippines.....	1911	E 92,617	1919	E 168,181	+75,564
French Equatorial Africa.....	—	—	1918	E 1,000,000	—
French West Africa.....	—	—	1921	E 5,863,971 <sup>4</sup>	—
Algeria.....	1911	E 8,528,610	1915	E 8,941,210	+412,600
Egypt.....	1914	E 816,184	1921	E 986,121	+169,937
Madagascar.....	1912	E 295,000	1920	E 300,000	+5,000
Italian Somaliland.....	—	—	1920	C 1,666,303	—
Tunis.....	1911	E 686,730	1919	E 2,661,579	+1,974,849
Total.....	—	— 262,591,586	—	— 207,778,951	-54,812,635
<b>Total Sheep.....</b>	—	— <b>476,631,306</b>	—	— <b>397,332,393</b>	<b>-79,301,913</b>
<b>Goats—</b>					
Malta.....	1911	E 17,587	1920	E 17,144	-443
Turks and Caicos Isles.....	1911	E 1,025	—	—	—
Jamaica.....	1911	E 18,000	1917	C 29,679	+11,679
Grenada.....	—	—	1918	E 6,000	—
Trinidad and Tobago.....	1911	E 5,732	1920	E 4,294	-1,438
British Guiana.....	1911	E 10,300	1920	E 11,260	+960
Cyprus <sup>5</sup> .....	1911	E 270,981	1921	E 169,249	-101,732
India Brit. Prov.....	1911	E 30,900,309	1920	C 24,133,710	-6,766,599
Ceylon.....	1911	E 195,155	1919	E 180,000	-15,155
Straits Settlements.....	1911	E 15,011	1919	E 20,528	+5,517
Union of South Africa.....	1911	C 11,762,979	1918	C 8,018,871	-3,744,108
Swaziland <sup>6</sup> .....	1911	C 163,593	1920	E 250,000	+86,407
Bechuanaland.....	—	—	1921	E 237,740 <sup>7</sup>	—
Rhodesia South.....	1911	C 601,635	1917	E 766,401	+164,766
Nyasaland.....	1911	E 138,318	1918	E 138,681	+363
Uganda.....	—	—	1919	E 605,100 <sup>8</sup>	—
Kenya.....	—	—	1920	E 3,653,008	—
(Protectorate of Southwest Africa).....	1911	E 395,243	—	—	—
Mauritius <sup>9</sup> .....	1911	E 6,600	1920	E 6,400	-200
St. Helena.....	1911	C 1,138	—	—	—
Australia.....	1911	E 280,086	1919	E 218,218	-61,868
New Guinea.....	1913	E 617	—	—	—
Papua.....	1911	E 619	1920	E 453	-166
New Zealand.....	1911	E 6,119	1921	E 17,367	+11,248
Fiji Isles <sup>10</sup> .....	1911	E 13,865	1920	E 14,531	+666
Total British Empire.....	—	— 44,406,889	—	— 33,996,786	-10,410,103

<sup>1</sup>Including Turkey in Europe. <sup>2</sup>Including goats. <sup>3</sup>Partial data. <sup>4</sup>Including Senegal and Mauritania. <sup>5</sup>Not including goats under one year old, estimated as equal to 30 p.c. of numbers given. <sup>6</sup>Including sheep. <sup>7</sup>Belonging to Natives only. <sup>8</sup>Not including goats in certain provinces. <sup>9</sup>Animals on sugar plantations. <sup>10</sup>Goats belonging to Europeans only.

## 57.—Number of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—continued.

(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.		Date nearest 1921.		Increase (+) or decrease (—).
	Actual date.	No.	Actual date.	No.	
<b>Goats—concluded.</b>					
Austria.....	1910	C 1,256,778	1918	E 748,007 <sup>1</sup>	—
Belgium.....	1910	C 217,823	—	—	—
Bulgaria.....	1910	C 1,464,719	—	—	—
Czecho-Slovakia.....	—	—	1920	E 1,174,045	—
Denmark.....	1909	E 40,257	1921	E 50,000	+9,743
Iceland.....	1911	E 671	1919	E 1,906	+1,235
Finland.....	1910	C 10,881	1918	C 12,400	+1,519
France.....	1911	E 1,424,180	1920	E 1,340,890	—83,290
Germany.....	1912	C 3,410,396	1921	E 4,337,299 <sup>2</sup>	+926,903
Greece.....	1911	C 2,638,043	1920	E 3,418,002	+779,959
Holland.....	1910	C 224,231	1921	C 272,298	+48,067
Hungary.....	1911	C 426,981	—	—	—
Italy.....	—	—	1918	C 3,082,558 <sup>3</sup>	—
Latvia.....	—	—	1920	C 28,686 <sup>4</sup>	—
Luxemburg.....	1910	C 10,315	1919	C 12,604	+2,289
Norway.....	1910	E 287,686 <sup>5</sup>	1918	C 203,099	—84,587
Portugal.....	—	—	1920	E 1,492,689	—
Spain.....	1911	E 3,639,624	1919	E 3,970,656	+331,032
Rumania.....	1911	E 186,515	1920	E 499,922	+313,407
Russia in Europe.....	—	—	1920	C 655,515	—
Russia in Asia.....	—	—	1920	C 1,675,27 <sup>6</sup>	—
Sweden.....	1911	E 66,136	1919	E 133,150	+67,014
Switzerland.....	1911	C 341,296	1921	C 329,192	—12,104
Turkey in Europe.....	1911	E 18,729,621	—	—	—
United States.....	1910	C 3,029,795	—	—	—
Hawaii.....	1910	C 5,000	1920	C 4,904	—96
Argentina.....	1911	E 4,301,955	1920	E 4,670,130	+368,175
Bolivia.....	1910	E 467,956	—	—	—
Brazil.....	1912	C 10,048,570	1916	C 6,919,550	—3,129,020
Chile.....	1911	E 210,143	1919	E 459,606	+249,463
Curaçao.....	1911	E 52,710	1920	E 62,510	+9,800
Guatemala.....	1913	E 10,790	1915	E 56,600	+45,810
Dutch Guiana.....	1911	E 2,636	1919	E 3,343	+707
Mexico.....	—	—	1920	E 1,987,869	—
Paraguay.....	—	—	1918	E 93,000	—
Uruguay.....	—	—	1916	C 12,218	—
Venezuela.....	—	—	1920	E 2,154,716	—
Japan.....	1911	E 100,081	1919	E 125,089	+25,008
Korea.....	—	—	1920	E 21,075	+12,714
Formosa.....	1911	E 128,513	1919	E 99,259	—29,254
Kuantung.....	1911	E 8,281	1918	E 7,767	—514
Philippines.....	1911	E 441,325	1919	E 731,849	+290,524
French India.....	1911	E 17,647	1920	E 24,216	+6,569
French Equatorial Africa.....	—	—	1918	E 1,500,000	—
French West Africa.....	—	—	1921	E 3,613,196 <sup>6</sup>	—
Algeria.....	1911	E 3,861,847	1915	E 3,768,723	—93,124
Egypt.....	1914	E 331,016	1916	E 424,418	+93,402
Madagascar.....	—	—	1919	E 140,328	—
<b>Total.....</b>	—	— 31,809,106	—	— 31,960,457	+151,351
<b>Total goats.....</b>	—	— 76,215,995	—	— 65,957,243	±10,258,752
<b>Swine—</b>					
United Kingdom.....	1911	E 4,250,013	1921	E 3,639,481	—610,532
Malta.....	1911	E 4,659	1920	E 3,227	—1,432
Canada.....	1911	C 3,610,428	1921	E 3,904,895	+294,467
Newfoundland.....	1911	C 19,321	—	—	—
Bermuda.....	—	—	1915	C 2,700	—
Jamaica.....	1911	E 31,116	1916	E 31,966	+850
Cayman Isles.....	1913	E 600	1919	E 500	—100
Trinidad and Tobago.....	1911	C 8,399	1920	E 8,540	+141
British Guiana.....	1911	E 17,000	1920	E 17,350	+350
Cyprus.....	1911	E 35,181	1921	E 16,765	—18,416
Ceylon.....	1911	E 86,548	1919	E 59,000	—27,548
Straits Settlements.....	1911	E 141,076	1919	E 266,905	+125,829
Union of South Africa.....	1911	C 1,081,600	1918	C 1,043,224	—38,376
Rhodesia South <sup>2</sup> .....	1911	C 10,801	1920	E 17,761	+6,960
Nyasaland.....	1911	E 18,640	1918	E 21,403	+2,763
Kenya.....	—	—	1920	E 9,485	—

<sup>1</sup>Bohemia, Moravia and Silesia. <sup>2</sup>Provisional data. <sup>3</sup>Not including occupied territory. <sup>4</sup>Not including data for the provinces added to Latvia by the Russo-Latvia Treaty of 1920. <sup>5</sup>Rural districts only, partial data. <sup>6</sup>Including Senegal and Mauritania.



**57.—Numbers of Farm Live Stock in the Principal Countries of the World, dates nearest 1911 and 1921—concluded.**  
(Italics indicate incomparability of data at the two periods.)

Countries.	Date nearest 1911.		Date nearest 1921.		Increase (+) or decrease (—).
	Actual date.	No.	Actual date.	No.	
<b>Swine—concluded.</b>					
Protectorate of S.-W. Africa..	1911	E 7,751	—	—	—
Mauritius <sup>1</sup> .....	1911	E 6,023	1920	E 3,775	—2,248
Seychelles.....	1911	E 6,000	—	—	—
Australia.....	1911	E 1,110,721	1919	E 695,968	—414,753
New Guinea.....	1912	E 2,866	—	—	—
New Zealand.....	1911	E 348,754	1921	E 349,892	+1,138
Fiji Isles <sup>2</sup> .....	1911	E 3,120	1915	E 1,978	—1,142
Total British Empire.....	—	—	—	—	—682,049
<i>Austria</i> .....	1910	C 6,432,080	1920	E 1,189,434	—5,242,646
<i>Belgium</i> .....	1911	E 1,229,428	1921	E 975,748	—253,680
<i>Bulgaria</i> .....	1910	C 527,311	—	—	—
<i>Czecho-Slovakia</i> .....	—	—	1920	E 2,015,223 <sup>3</sup>	—
<i>Denmark</i> .....	1909	E 1,467,822	1921	E 1,429,908	—37,914
<i>Esthonia</i> <sup>4</sup> .....	—	—	1920	E 260,693	—
<i>Finland</i> .....	1910	C 422,283	1918	C 110,933 <sup>5</sup>	—311,350
<i>France</i> .....	1911	E 6,719,570	1920	E 4,941,960	—1,777,610
<i>Germany</i> .....	1912	C 21,923,707	1921	E 15,875,636 <sup>6</sup>	—6,048,071
<i>Greece</i> .....	1911	C 227,176	1920	E 416,221	+189,045
<i>Holland</i> .....	1910	C 1,259,844	1921	C 1,519,245	+259,401
<i>Hungary</i> .....	1911	C 7,580,446	1920	E 3,320,000	—4,260,446
<i>Italy</i> .....	1914	E 2,722,000	1918	C 2,338,926 <sup>7</sup>	—383,074
<i>Latvia</i> .....	—	—	1921	E 482,000	—
<i>Luxemburg</i> .....	1910	C 128,035	1919	C 88,583	—39,452
<i>Norway</i> .....	1910	E 333,709 <sup>8</sup>	1918	C 214,305	—119,404
<i>Poland</i> .....	—	—	1921	C 5,101,384	—
<i>Portugal</i> .....	—	—	1920	E 921,312	—
<i>Rumania</i> .....	1911	E 1,021,465	1920	E 2,513,610	+1,492,145
<i>Russia in Europe</i> .....	1911	E 12,322,966	1920	C 12,271,329	—51,637
<i>Russia in Asia</i> .....	1911	E 1,764,836	1920	C 2,587,896	+823,060
<i>Serb-Croat-Slovene States</i> .....	1910	C 865,769	1921	C 3,281,026	+2,415,257
<i>Spain</i> .....	1911	E 2,472,416	1919	E 4,433,964	+1,961,548
<i>Sweden</i> .....	1911	E 951,164	1919	E 716,783	—234,381
<i>Switzerland</i> .....	1911	C 570,226	1921	C 638,761	+68,535
<i>Turkey</i> .....	1911	E 164,216 <sup>9</sup>	—	—	—
<i>United States</i> .....	1911	E 65,620,000	1921	E 56,097,000	—9,523,000
<i>Argentina</i> .....	1911	E 2,900,000	1920	E 3,227,346	+327,346
<i>Bolivia</i> .....	1910	E 114,146	—	—	—
<i>Brazil</i> .....	1912	C 18,400,530	1916	C 17,329,210	—1,071,320
<i>Chile</i> .....	1911	E 160,050	1919	E 292,431	+132,381
<i>Colombia</i> .....	—	—	1915	C 711,482	—
<i>Costa Rica</i> .....	1910	C 69,712	1915	E 76,198	+6,486
<i>Guatemala</i> .....	1913	E 188,390	1915	E 102,531	—85,859
<i>Curaçao</i> .....	1911	E 7,061	1920	E 2,407	—4,654
<i>Honduras</i> .....	1910	E 154,352	1914	E 180,092	+25,740
<i>Mexico</i> .....	—	—	1920	E 1,654,089	—
<i>Paraguay</i> .....	—	—	1918	E 87,000	—
<i>Peru</i> .....	—	—	1917	E 400,000	—
<i>Porto Rico</i> .....	1915	C 106,000	—	—	—
<i>Uruguay</i> .....	—	—	1916	C 303,958	—
<i>Venezuela</i> .....	—	—	1920	E 512,086	—
<i>China</i> .....	—	—	1916	E 44,711,397 <sup>10</sup>	—
<i>Japan</i> .....	1911	E 298,709	1917	E 470,082	+171,373
<i>Korea</i> .....	1911	E 572,840	1920	E 977,368	+404,528
<i>Formosa</i> .....	1911	E 1,290,387	1919	E 1,313,067	+22,680
<i>Kuantung</i> .....	1911	E 57,454	1918	E 85,039	+27,585
<i>Philippines</i> .....	1911	E 1,661,931	1919	E 3,129,676	+1,467,745
<i>Siam</i> .....	1913	E 748,950 <sup>11</sup>	1920	E 749,939	+989
<i>French Equatorial (Africa)</i> .....	—	—	1918	E 150,000	—
<i>French West Africa</i> .....	—	—	1921	E 115,958	—
<i>Algeria</i> .....	1911	E 110,012	1915	E 111,369	+1,357
<i>Egypt</i> .....	1915	E 7,259	1920	E 21,919	+14,660
<i>Madagascar</i> .....	1912	E 600,000	1920	E 1,000,000	+400,000
<i>French W. Morocco</i> .....	1915	E 15,955	1921	E 130,000	+114,045
<i>Mozambique</i> .....	1911	E 33,155	1916	E 23,592	—9,563
<i>Tunis</i> .....	1911	E 17,898	1919	E 17,680	—218
Total.....	—	—	—	—	—19,128,373
<b>Total swine</b> .....	—	—	—	—	—19,810,422

<sup>1</sup>Pigs on sugar plantations. <sup>2</sup>Pigs belonging to Europeans only. <sup>3</sup>Not including pigs ranging from three months to one year old. <sup>4</sup>Not including the district of Petersi. <sup>5</sup>Pigs over four months. <sup>6</sup>Provisional data. <sup>7</sup>Not including occupied territory. <sup>8</sup>Rural communes only. <sup>9</sup>Including Turkey in Asia. <sup>10</sup>Partial data. <sup>11</sup>Data from 17 out of 18 provinces and excluding four districts.

**58.—Numbers of Farm Live Stock in the British Empire, dates nearest 1911 and 1921.**

Description	Date nearest 1911.	Per cent of world's total	Date nearest 1921.	Per cent of world's total.	Increase (+), or decrease (—).	
	No.	p.c.	No.	p.c.	No.	p.c.
Horses.....	10,054,062	10.2	11,482,554	13.2	+ 1,428,492	+14.2
Asses.....	1,897,494	24.1	2,136,596	20.7	+ 239,102	+12.6
Mules.....	212,563	3.2	174,367	2.2	— 38,196	—18.0
Cattle.....	156,220,984	37.8	192,356,174	44.0	+36,135,190	+23.1
Sheep.....	214,042,720	44.9	189,553,442	47.7	—24,489,278	—11.4
Goats.....	44,406,889	58.3	33,996,786	51.5	—10,410,103	—23.4
Swine.....	10,764,679	6.2	10,082,630	6.5	— 682,049	— 6.3

**59.—World's Total Number of Farm Live Stock, dates nearest 1911 and 1921.**

Description.	Countries.	Date nearest 1911.	Date nearest 1921.	Increase (+), or decrease (—).	
	No.	No.	No.	No.	p.c.
Horses.....	49	98,807,544	87,107,595	—11,699,949	—11.8
Asses.....	28	7,863,075	8,420,397	+ 557,322	+ 7.1
Mules.....	19	6,558,774	7,845,704	+ 1,286,930	+19.6
Cattle.....	65	413,456,904	436,837,977	+23,381,073	+ 5.7
Sheep.....	51	476,634,306	397,332,393	—79,301,913	—16.6
Goats.....	45	76,215,995	65,957,243	—10,258,752	—13.5
Swine.....	56	174,094,266	154,283,844	—19,810,422	—11.4

**AGRICULTURAL EXPERIMENT STATIONS OF CANADA.****Dominion Experimental Farms and Stations.**

**Central and Branch Farms.**—Inaugurated in 1886 by Act of Parliament, the Dominion Experimental Farms system was at first made up of the Central Farm at Ottawa and four branch Farms: one at Nappan, Nova Scotia, for the Maritime Provinces; one at Brandon for Manitoba; one at Indian Head for the Northwest Territories and one at Agassiz for British Columbia.

The opening up and rapid settlement of the Dominion have led to a corresponding increase in the number of Experimental Farms and Stations<sup>1</sup>. These with the two Tobacco Stations now total 24, with a total acreage of 12,484, as compared with the original five Farms, having a total acreage of 3,472, as established in 1886. Table 60 shows the present number of Farms and Stations with the acreage of each and the date of establishment.

<sup>1</sup>The five original farms established in 1886 are known as "Experimental Farms"; those added since are styled "Experimental Stations." No distinction in the work is expressed by these titles.

## 60.—Dominion Experimental Farms and Stations, 1921.

Farm or Station.	Province.	Acreage.	Date estab-lished.
Central Farm, Ottawa.....	Ontario.....	467	1886
Kapuskasing Station.....	Ontario.....	1,282	1916
Harrow Tobacco Station.....	Ontario.....	40	1909
Charlottetown Station.....	Prince Edward Island.....	100	1909
Nappan Farm.....	Nova Scotia.....	460	1886
Kentville Station.....	Nova Scotia.....	434	1912
Fredericton Station.....	New Brunswick.....	520	1912
Ste. Anne de la Pocatière Station.....	Quebec.....	340	1911
Cap Rouge Station.....	Quebec.....	339	1911
Lennoxville Station.....	Quebec.....	455	1914
La Ferme Station.....	Quebec.....	1,200	1916
Farnham Tobacco Station.....	Quebec.....	65	1912
Brandon Farm.....	Manitoba.....	625	1886
Morden Station.....	Manitoba.....	280	1915
Indian Head Farm.....	Saskatchewan.....	680	1886
Rosthern Station.....	Saskatchewan.....	650	1908
Scott Station.....	Saskatchewan.....	520	1910
Swift Current Station.....	Saskatchewan.....	640	1920
Lacombe Station.....	Alberta.....	850	1907
Leithbridge Station.....	Alberta.....	400	1906
Invermere Station.....	British Columbia.....	53	1912
Summerland Station.....	British Columbia.....	550	1914
Agassiz Farm.....	British Columbia.....	1,400	1886
Sidney Station, Vancouver Island.....	British Columbia.....	125	1912

In addition there are eight sub-stations, viz: Salmon Arm, B.C.; Swede Creek, Yukon Territory; Fort Vermilion, Grouard and Beaverlodge, Alberta; and Forts Smith, Resolution and Providence, Northwest Territories. Experimental work under the Division of Illustration Stations is conducted on 12 farms in Saskatchewan, 12 in Alberta, seven in British Columbia, 32 in Quebec, 10 in New Brunswick and 11 in Nova Scotia.

*Organization of the System of Experimental Farms.*—The Central Farm at Ottawa, as its name implies, is the centre or headquarters of the system. Thereat are situated the Director, having control and general supervision of the whole, and the chief technical officers, having charge each of his special line of work, both at the Central and Branch Farms. At Ottawa, the policy to be pursued throughout the system is settled by agreement after discussion by the Director, the technical officers and the superintendents on whose branch farms the work is to be conducted. The technical staff at Ottawa supervise the actual experimental work at the Central Farm. At the branches, the superintendents are in charge of the carrying out of the various lines of general experiment and also conduct experiments which are of local importance.

The Divisions at Ottawa, which also represent the different lines of work carried on throughout the system, and which have each a technical officer in charge, are as follows: (1) Animal Husbandry; (2) Bees; (3) Botany; (4) Cereals; (5) Chemistry; (6) Extension and Publicity; (7) Economic Fibre Production; (8) Field Husbandry; (9) Forage Plants; (10) Horticulture; (11) Illustration Stations; (12) Poultry and (13) Tobacco. Briefly the main lines of the work of these Divisions are as follows:—

*Animal Husbandry.*—This Division comprises work with beef cattle, dairy cattle and dairying, horses, sheep and swine, and undertakes experiments in the breeding, feeding, housing and management of each of these classes of live stock.

*Bees.*—The Bee Division covers the breeding, feeding and manipulation of bees, and the study of bee products, including their marketing.

*Botany.*—The work of this Division falls into two classes of Economic Botany and Plant Pathology. The former includes the study of medicinal, poisonous and economic plants. Different varieties and strains of fibre plants are also studied, and special attention is given to the life history and control of weeds. The Division has also charge of the Arboretum at the Central Farm. In Plant Pathology, in addition to the pathological laboratory at Ottawa, there are laboratories at Charlottetown, P.E.I., Fredericton, N.B., St. Catharines, Ont., Brandon, Man., Indian Head, Sask., and Summerland, B.C. Investigations are being conducted into diseases affecting forest trees, fruit trees, cereals, small fruits, potatoes, vegetables and tobaccos.

*Cereals.*—In the Cereal Division, the work comprises the production, by cross-breeding and selection, of new varieties of grains and the testing of these as to their suitability for various parts of Canada. Approved varieties are grown on a larger scale, and samples are distributed free to applicant farmers. Among the more recent varieties produced in this Division and now widely grown in Canada are the Arthur pea and the Huron, Marquis and Prelude wheats. Two interesting varieties now being introduced are the Ruby wheat, ripening not quite so early as Prelude but yielding better, and the Liberty Hull-less oat, which should greatly widen the field of usefulness of this cereal and simplify the processes of its manufacture into food for man and beast. The Division also carries on extensive milling and baking tests.

*Chemistry.*—The work of the Division of Chemistry comprises the analysis of fodders and feeding stuffs, fertilizers, soils, well waters, insecticides, fungicides, etc. It also assists other Divisions in chemical problems and does a large amount of analytical work for other branches of the Department and for military and civilian use abroad. Field tests with various kinds and quantities of fertilizers are carried on by this Division at a number of the branch farms and stations.

*Extension and Publicity.*—This Division acts as a connecting link between the Experimental Farms and the farmer by making the work of the former as widely known as possible. Two chief means used are the placing of an exhibit at as many fairs as possible each year and the extension of the departmental mailing lists.

*Economic Fibre Plants.*—The Division studies the areas in Canada suitable for fibre production, the best varieties and strains of seed of fibre plants, cultural methods, harvesting, retting and



scutching processes, etc. Chiefly for demonstrational purposes, the Division is operating at Clinton, Huron County, Ontario, a leased commercial flax mill.

*Field Husbandry.*—This Division tests or applies, under field conditions, the results obtained by other Divisions more directly engaged in scientific research. Some of the main lines of work under way are tests of fertilizers, methods of drainage, rotations and cultural methods. Data of cost of production of field crops are gathered in connection with this work.

*Forage Plants.*—The Division has for its work the variety testing of grasses, leguminous forage plants, field roots and Indian corn; plant breeding with these; the collection of genera and species likely to be of value as forage plants; the study of the possibilities and methods of growing root seed, including sugar beets, in Canada, and the distribution for trial of seed of varieties newly obtained and not available commercially.

*Horticulture.*—The work of the Division of Horticulture falls under four main heads: vegetable gardening, orcharding and small fruits, ornamental gardening and plant breeding. In the three first named, the testing of varieties is a main feature, with a view to ascertaining the hardiest, earliest, best-yielding and most disease-resistant sorts. In plant breeding, the aim is the improvement of existing sorts by cross-breeding. Greenhouse work is also given special attention at Ottawa. Canning experiments and demonstrations are carried on.

*Illustration Stations.*—This Division forms another connecting link between the Experimental Farms and the farmer. These Stations are now 84 in number. Each is located on the farm of a representative farmer, who does the work according to directions framed to illustrate the best rotations, the best varieties of crops, and the best cultural methods, as determined by the work of years on the Experimental Farms.

*Poultry.*—The scope of work of the Poultry Division has been greatly extended during the last few years. It now covers the following main lines of investigation: artificial and natural incubation, poultry breeding, systems of breeding and rearing, production of heavy-laying strains, feeding for eggs and table and housing of poultry. Poultry survey work, i.e., the endeavour to get groups of farmers in various localities to keep accurate records of their poultry costs and returns, is already showing results in the better housing, breeding and care of the farm flock. Egg-laying contests and record of performance work are carried on.

*Tobacco.*—The Tobacco Division deals with the breeding, variety tests and cultural methods, the warehousing and marketing of tobacco. A complete analysis of the soils of the tobacco-producing regions of Canada is being made. During the growing season, inspectors

examine the tobacco fields of as many growers as possible, with a view to suggesting the best cultural methods and means of combating diseases and insect pests.

In addition to the work done by the Division of Extension and Publicity and Illustration Stations, the results of the work of the Experimental Farms are made available to the farmer (1) by correspondence; (2) by publications; (3) by "Seasonable Hints", now in its seventh year, a 16-page pamphlet brought out every four months, with a circulation of above 300,000; and (4) by articles in the press. The Farm officers devote considerable time each year to lecturing, demonstrating, judging at fairs and assisting at Short Courses in Agriculture. Excursions to the various farms are also a valuable means of bringing the work to the attention of the farmer.

### NOVA SCOTIA.

**College of Agriculture, Truro.**—About 430 acres are devoted to general farming, gardening and investigations. Conducted primarily as a college and distributing station for pure-bred live stock and seeds, investigational work does not occupy so prominent a position as it does at a purely experimental station. Nevertheless, practical experiments are being carried on amongst which the following are the most important. Ten years' experiments with ground limestone have given variable results, but the clover catch has been markedly improved on the poorer lands. Club root in turnips, cabbage, etc., has been almost perfectly controlled. Upon a run-out farm purchased in 1917, experiments are being conducted with basic slag, acid phosphate, bone meal, ground limestone and with the addition to all these of nitrate of soda and sulphate of ammonia. On the same land an experiment has been established to ascertain the returns of potatoes from applications of potash. Also high grade slag with a large percentage of citric soluble phosphoric acid is being tested against lower grade slag with little or no citric soluble phosphoric acid—the product of open hearth furnaces. On all these lands no barnyard manure is being used; and an attempt is being made to demonstrate the possibility of bringing in land by the use of commercial fertilizers and of a triennial rotation during which a clover sod is once ploughed under. A permanent pasture experiment was begun ten years ago to determine the value of top dressing with basic slag, acid phosphate and wood ashes. Experiments to determine the fertilizing value of a crude salt mined at Malagash have given good results for mangolds and in some cases also for grain crops. Three classes of silage crops are being tried under identical conditions, viz., corn, sunflowers and O.P.V. (the College name for a mixture of oats, peas and vetches). The value of the O.P.V. mixture is now thoroughly proved under Nova Scotia conditions. Sunflowers have given good results for two years; but corn has proved very variable. Field and garden experiments have shown good results from the use of home grown oats, wheat, turnips and tomatoes, as compared with seed of these crops grown elsewhere. Experiments have been begun

in the control of the cabbage root maggot, and with insects affecting orchard fruits, carrots and other vegetables. The cabbage root maggot is now perfectly controlled, but further work remains to be done with other root and vegetable pests. In the Poultry Department experiments are being conducted with various kinds of feed, with the use of electric light in laying pens during the winter and with various strains of poultry. A Nova Scotia poultry laying contest is being conducted for the third year. Details of the College experimental work, including results obtained, are published in the Annual Report of the Secretary for Agriculture for the province. The College itself enrolls about 100 students annually in its regular course, and from 300 to 500 annually in various short courses. A College prospectus, annually issued, contains complete accounts of the nature of the studies in these courses.

#### QUEBEC.

**Macdonald College, Ste. Anne de Bellevue.**—The College is situated about 20 miles west of Montreal and is incorporated with McGill University. The College property comprises 786 acres divided as follows: main farm, 584 acres; cereal husbandry plots, 75 acres; poultry department, 17 acres; orchard, 35 acres; vegetable gardens, 25 acres; the campus, including driveways, lawns, trees, shrubs, flower beds, school garden and recreation fields for students of both sexes, 50 acres. The agricultural engineering, animal husbandry, bacteriology, botany, cereal husbandry, chemistry, horticulture, physics, poultry, zoology and entomology departments are all well equipped for the numerous researches and experiments under way. In the *School of Agriculture*, the courses offered include 4-year courses, leading to the B.S.A. and B.Sc. in Agr. degrees, a 4½ months winter practical course for farmers and farmers' sons, and various short courses. Postgraduate work can be taken in cereal husbandry, entomology, plant pathology, bacteriology, etc.—the higher degrees offered being M.S.A., M.Sc. and Ph.D. In the *School of Household Science*, the courses include a 4-year course, leading to the degree of Bachelor of Household Science, a 2-year institution administration course, a 1-year homemaker course, three short courses each of about 3 months duration in household science, etc. In the *School for Teachers*, courses, under the Protestant Committee of the Council of Public Instruction of the Province of Quebec, are offered leading to model, kindergarten and elementary diplomas. The teaching and experimental staff of the College consists of about 60 members. The total enrolment for 1920-21 was 486. More complete information respecting the work of the College will be found on record in the Canada Year Book of 1916-17, pp. 241-242, and 1918, pp. 235-237. The annual report of the College and the annual announcement should be consulted.

**Oka Agricultural Institute.**—Situated on the Lake of Two Mountains, about 20 miles from Montreal, the Oka Agricultural Institute is one of the oldest experimental farms in Canada. It was



affiliated to the Laval University of Montreal (now University of Montreal) on March 25, 1908. The total area of the farm comprises 1,800 acres, including all kinds of soil. Horticulture holds an important place. The area devoted to fruit trees is about 40 acres, and includes 4,000 trees (apples, cherries, pears and plums) grown according to the most recent methods. Special attention is given to the breeding of live stock. The dairy herd is of considerable importance and has been entirely formed at the Institute itself. Official milk records begun in 1918 have already resulted in the registration of 37 animals in the "Record of Performance", with an average yield exceeding 10,000 lb. of milk. The raising of swine, poultry and bees is also practised. The poultry houses shelter thousands of birds, amongst them the famous hen "Chantecler", bred by the poultry manager and registered in the United States Standard of Perfection in 1921. Mention should also be made of the modern rabbit hutch 70 ft. x 13 ft., probably unique of its kind in Canada. The Institute can accommodate about 150 indoor students. The present curriculum includes (1) a scientific course of four years leading to the University degree of B.S.A.; (2) a practical course of two years for young men less advanced, embracing all the principal agricultural subjects, such as general agriculture, cereals, fodder plants, rural and hygienic construction, machines and motors, the cultivation of fruits and vegetables and the breeding and utilization of farm live stock. The famous Oka cheese (Port du Salut) made at this Institute is widely known throughout the North American continent.

**School of Agriculture, Ste. Anne de la Pocatière.**—This school, with accommodation for 125 boarders, is situated on the southern slope of a hill dominating a farm of nearly 600 acres. Within one mile of the Intercolonial Railway and on the Quebec-Rivière-du-Loup line, it is easily accessible, and attracts thousands of visitors, who seek agricultural information from both the School and the Dominion Experimental Station, which is not more than a mile from the village. The students of the School are divided into (1) those taking a four-years' agronomic course, and (2) those receiving special practical training for two years. The School is affiliated to Laval University, Quebec, which awards the degree of B.S.A. (Bachelor of Science in Agriculture) to successful students of the first class, whilst those in the other receive a Certificate of Agricultural Proficiency (Brevet de Capacité Agricole). Lectures in adjacent parishes are frequently given by the School professors, who also conduct agricultural pages in two of the largest provincial weeklies for the extension of new agricultural information. Cultural experiments are also undertaken at the School, and bulletins are published.

#### ONTARIO.

**Ontario Agricultural College and Experimental Farm, Guelph.**—The College and Experiment Station were established in 1874 to train young farmers in the science and practice of agriculture and to conduct agricultural experiments for the benefit of the



province. The land property consists of a little more than 700 acres of average loam soil. The farm property consists of 500 acres; experimental plots of about 100 acres and campus and woodlots form the remainder. The growth of the institution as an educational centre has been very rapid. Academic work at the present time requires the space and equipment of sixteen large buildings for dormitories, class rooms and laboratories. Courses offered include a four-year course for the degree of B.S.A. (Bachelor of Science in Agriculture), a two-year course for the Associate Diploma, winter courses for farmers and farmers' sons, summer courses for teachers of the province and domestic science courses at Macdonald Institute. The teaching and experimental staff consists of about seventy-five members. In 1874 the College opened with 28 students. The total enrolment in long and short courses in the academic year 1920-21 was 2,268. More complete information respecting the researches and experimental work undertaken at the College will be found on record in the Canada Year Book of 1916-17, pp. 243-245, and 1918, pp. 238-241. Also reference may be made to the Forty-seventh Annual Report of the College, covering the year 1921.

#### MANITOBA.

**Manitoba Agricultural College, Winnipeg.**—Field husbandry experiments are conducted in three divisions: (1) Forage Crop Improvement; (2) Cereal Crop Improvement; and (3) Soil and Crop Management. The work of the Forage Crop Improvement Division has for its object the production and improvement of plants suitable under Manitoba conditions for pasture and hay and fodder purposes. Varieties and strains of forage crops have been imported from the United States and European countries, and improvement is being obtained by selection and hybridization. The major investigations are being conducted with alfalfa and red clover, but some work is also being done with sweet clover, timothy, western rye, bromes meadow fescue and meadow foxtail. Profitable results have been obtained in the improvement of fodder corn, especially by securing early maturing strains. In the Cereal Crop Improvement Division the work consists of the testing and classification of cereal varieties with a view to standardization. The crops under study are wheat, oats, barley, flax, spring and fall rye, peas and buckwheat. Introductions of cereals have been made from various parts of the world, and selections have been made which promise to be of value. Hybridization for improvement is also followed, and some promising crosses are now under test. In the Soil and Crop Management Division the projects include soil renovation and soil cultivation experiments, experiments in cereal crops, perennial and annual forage crops, hoed crops and cropping sequence. Work is also being done in silage and in ascertaining the carrying capacity of the grasses and clover when used for pasture.

The Departments of Botany, Horticulture, Animal Husbandry, Physics, Chemistry and Engineering are also doing considerable investigational work.

## SASKATCHEWAN.

**University of Saskatchewan, Saskatoon.**—The College of Agriculture has over 1,300 acres of land at the University and another 560 acres about 35 miles distant which were bequeathed to the College by a pioneer settler, an ex-student of the University of Cambridge, England. Of the 1,300 acres, 210 acres are set aside for experimental work in field husbandry and horticulture. Two hundred and seventy acres of prairie were purchased in 1918, 100 acres of which have been broken for the Field Husbandry Department. The remaining 800 acres are operated as a general farm with great diversification of crops. The buildings, paddocks, etc., are located on an adjoining half section of land designated as the campus or building plot. The College offers a four year course leading to the Degree of Bachelor of Science in Agriculture (B.S.A.), and a three year associate course for farmers' sons intending to make farming their life work. Short courses in general agriculture, tillage, crops, live stock, poultry, dairying and engineering, are held for adult farmers during the winter months, both at the College and at various points throughout the province.

Practical experiments are undertaken in the departments of field and animal husbandry, as well as a variety of scientific investigations in the departments of chemistry, physics, biology, engineering, etc.

## ALBERTA.

**College of Agriculture, Edmonton South.**—A College of Agriculture has been established at the University of Alberta, Edmonton South. Students completing two years at any of the six provincial Schools of Agriculture (situated at Claresholm, Olds, Vermilion, Gleichen, Raymond and Youngstown) enter the College for a three years' course leading to the degree of Bachelor of Science in Agriculture. At these Schools various experiments are in progress as described in the last edition of the Year Book, 1920, p. 286. At the College itself numerous agricultural experiments are also being conducted, including the following tests: Determination as to whether the present varieties of wheat, oats, barley and peas are suitable for the Park Belt sections of Alberta; breeding and selection of promising varieties of wheat for earlier maturity combined with high milling qualities; the testing of alfalfas, red clover, sweet clover and alsike for winter hardiness and of sweet clover in the Open Plains sections to determine its drought hardiness; varieties of corn and sunflowers for fodder; relative suitability of corn and sunflowers for the Park Belt; selection of a suitable grain corn for the dry sections; growth of alfalfa and sweet clover for hay and seed; nurse crops with clover and timothy; pasturing of dairy cows and other cattle; utilization of the best native grasses of Alberta; hay and pasture production; effects of frost on grain; production of alfalfa seed; factors of hardiness in winter wheat; sunflowers; potatoes; seed production; various experiments with cattle, sheep and swine. A start has been made in a definite soil survey of the province, beginning with the soil-blown area of the south.

## BRITISH COLUMBIA.

**Department of Agriculture.**—The experiments conducted by the Department of Agriculture include investigations in the three branches of Horticulture, Plant Pathology and Soils and Crops. Experiments in the control of the Strawberry Root Weevil (*Otiorynchus ovatus*, Linn.) have been conducted during three years. The data obtained have been very satisfactory, and it is intended to continue the work. Three years of experiments for the control of Anthracnose (*Neofabraea malicorticis*) have demonstrated the advisability of fall spraying with Bordeaux mixture before fall rains begin. Demonstration work in orchard cover crops is being carried on both in the Kootenays and the Okanagan. The work in the Kootenays has been confined principally to the use of vetches. In the Okanagan valley vetches were first used and followed by alfalfa, particularly in places where the amount of water could be obtained that would insure a satisfactory catch of alfalfa. Spraying experiments for the control of Blister Mite have been carried on during the season of 1921 with satisfactory results. These will be continued during the season of 1922, and the best type of spreaders to use in commercial sprays will also be inquired into. An investigation was conducted during 1921 to ascertain the most prevalent types of potato disease in eight different districts. The results suggest that owing to the low percentages of leaf roll and mosaic in the province as a whole, there is nothing to prevent the establishment of a successful seed potato industry. The investigation was conducted in conjunction with the establishment of a seed potato certification system by the Soil and Crop Division. Agricultural surveys conducted during 1921 were designed to obtain information upon soil and climatic conditions in relation to the most suitable types of farming.

**University of British Columbia.**—Considerable progress has been made with the clearing and preparation of land for experimental and general farm purposes. The investigational results obtained by the Departments of Agronomy and Horticulture are becoming increasingly valuable, especially for farmers and gardeners cultivating upland coast soils. In the Department of Animal Husbandry, excellent foundation stock has been purchased, consisting of Jerseys, Ayrshires, Shorthorns and Herefords. The University has also acquired good Yorkshire and Berkshire pigs and Southdown, Shropshire and Oxford Down sheep. Seven Clydesdale mares formerly at Colony Farm now form the horse-breeding nucleus. Departments of dairying and poultry have been organized, and are carrying on investigational and instructional work. In addition to the teaching and investigational work at the University, the members of the Faculty of Agriculture, in co-operation with the Dominion and Provincial Governments, have organized and conducted considerable extension work throughout the province.



**FUR TRADE.**

From about the year 1500 Basque and Breton fishermen came to Canada to fish and traded for furs in their spare time. As the fashions at the French court demanded more and more furs, adventurers came for the fur trade exclusively. Pont-Gravé and Chauvin built Tadoussac in 1599 as a centre for trade with the Indians of the Saguenay and, when trade routes were found farther inland, Quebec and Montreal were built as trading posts. The French government from the first granted monopolies of the fur trade, always on the condition that the company should bring to Canada a stated number of settlers. But settlement and fur trade could never be equal powers—settlement by driving fur-bearing animals farther afield made trading increasingly expensive, and so a company would make hay while the sun shone and would try to keep the sun shining by preventing information as to its operations from reaching France. The de Caen Company sent yearly to France from 15,000 to 20,000 pelts. The great profits of the fur trade, together with its freedom and romance, took all the adventurous from the rational pursuits of a settler. Trade spread west and south by the river routes and convoys brought the furs yearly to Montreal and Quebec.

In the meantime, English navigators had been seeking a North-west Passage to the Orient. By 1632 their efforts came to an end with little practical result, as it seemed, but Hudson bay had been accurately charted, so that when the first English fur-trading ships came some thirty years later, they sailed by charted routes to a safe harbour. The first expedition came at the instigation of Radisson and Groseilliers, two French coureurs de bois who had travelled in the rich fur country north of Lake Superior. They had sought aid in France, but being repulsed turned to England. The charter of the "Adventurers of England trading into Hudson's Bay" was obtained in 1670 by Prince Rupert, who became first governor of the Company (whence the name Rupert's land). In 1676, merchandise costing £650 was sent to the Bay and the furs got by barter were sent to England and sold for £19,500. The dividend on the stock of £10,500 was sometimes as high as 100 per cent; then during the struggle with the French beginning about 1685 no return was made, but with the English victory, the Company resumed payments, usually amounting to 20 per cent per annum. Forts were built on Hudson bay and James bay at the mouths of rivers, and the Company, in the indolent attitude of the monopolist, waited for furs to be brought to its posts.

With the outcome of the Seven Years' War, fur trade from the south passed out of the hands of the French and until 1771 the English were rediscovering the old French routes to the West. A period of open competition followed. The discoverer of a new fur district was soon followed by competitors who undersold him and were undersold by him until some or all were ruined and left for new fields. "The goods were bartered away for a consideration below their values. . . . the Indians were corrupted and the English character was brought into contempt". At length, the competitors would join



their interests, forming a concern subject to general rules. Such a concern was the Northwest Company, founded in 1783-4, with a stock divided into 16 shares. No capital was deposited, but each party supplied a proportion of the articles needed for trade. The Northwest Company pursued a vigorous policy, founding posts to control all the best fur districts. The Hudson's Bay Company felt the keenness of the competition, and was forced to abandon its ancient policy of waiting for furs to be brought to the bay. By 1816 the rivals had absorbed or ruined eleven other partnerships and were themselves on the verge of ruin. Finally in 1821, the two were joined under the name of the older company. The Northwest Company brought with it the control of the Pacific and Arctic watersheds, to be added to the lands draining into Hudson bay, and over the whole region the Hudson's Bay Company secured legal recognition of its monopoly of the fur trade. There followed forty years of great prosperity. "Over 150,000 Indians spent their laborious lives in gleanings the wealth of the forests and streams, and over 3,000 employees took charge of the commodities from the sale of which over 60 per cent dividend was annually distributed in profits". The Company's rights of exclusive trading in Indian territory expired in 1859 and ten years later it surrendered its other privileges. In return, Canada granted £300,000 to the Company, as well as lands about its trading posts, and one-twentieth of the land in the fertile belt between the North Saskatchewan River and the United States boundary. The Hudson's Bay Company thereupon became a trading company with no extraordinary privileges.

Great changes have come over the Canadian fur trade in recent years. During the Great War the important market changed from London to the United States, as is shown in the figures for the war years. Of the \$5,100,000 worth of undressed furs exported to England and the United States in 1914, England received \$3,000,000; in 1919 out of \$13,300,000 worth only \$3,700,000 went to England. During the war period, also, Montreal took a position as an international fur market.

Improved methods of capture, together with the advance of settlement, have driven fur-bearing animals farther afield and given them less chance to escape. Close seasons have been declared for Russian sable and Bolivian chinchilla and Canadian beaver, but even this has been insufficient, as is shown by a continued decrease in the numbers of the animals. The fur trade has taken other methods to supply the demand by renaming common and despised furs and by encouraging the use of the furs of domestic animals. About forty years ago, Persian lamb, astrachan and broadtail came into general use, and the increasing demand has always been met, for these are the furs of domestic animals which may be bred under supervision. Of fur-bearing wild animals in Canada, the fox was most suited for domestication, being least disturbed by human beings. The successful breeding of the fox on fur farms came in the period of rising prices after 1890 with the introduction of woven wire fencing. Other animals have been domesticated, though less successfully than the fox—raccoon, mink, martin, otter, skunk, muskrat and beaver. For

1919-20 the total fur production of Canada was valued at \$21,387,005 and for 1920-21 at \$10,151,594. For the same years the value of the pelts sold from fur farms was \$388,335 and \$626,900; in both years the large item in the production was silver fox, which, being more valuable as well as more tractable, is most successfully bred. Statistics of the number and value of pelts produced are given by provinces in Table 61 for the year 1919-20 and 1920-21, while the number and value of pelts are given by kinds in Table 62.

**61.—Numbers and Values of Pelts purchased by Traders from Trappers and Fur Farmers, years ended June 30, 1920 and 1921.**

Province.	Number of Pelts.		Value of Pelts.	
	1919-20.	1920-21.	1919-20.	1920-21.
Prince Edward Island.....	15,929	5,678	\$ 660,704	\$ 256,137
Nova Scotia.....	70,042	53,051	288,166	112,948
New Brunswick.....	51,545	32,858	225,871	72,500
Quebec.....	577,731	374,167	4,587,110	2,061,853
Ontario.....	834,733	739,113	6,418,330	3,048,815
Manitoba.....	725,421	505,177	3,130,627	1,055,865
Saskatchewan.....	622,485	341,839	2,338,779	717,149
Alberta.....	407,946	539,832	1,550,509	1,087,164
British Columbia.....	83,936	120,499	742,416	507,134
Yukon.....	55,354	16,125	323,467	78,189
Northwest Territories.....	154,882	208,068	1,121,026	1,153,840
<b>Canada.....</b>	<b>3,500,004</b>	<b>2,936,407</b>	<b>\$21,387,005</b>	<b>\$10,151,594</b>

**62.—Kind, Number, Total Value and Average Value of Pelts of Fur-bearing Animals Taken in Canada, year ended June 30, 1921.**

Kind.	Number of pelts.	Total value of pelts.	Average value per pelt 1920-21.	Average value per pelt 1919-20.
		\$	\$ cts.	\$ cts.
Badger.....	1,216	1,176	0 96	1 44
Bear, black.....	6,991	88,293	12 62	14 37
Bear, brown.....	795	7,789	9 79	14 34
Bear, grizzly.....	137	3,036	22 16	20 80
Bear, white.....	282	6,943	24 62	31 77
Beaver.....	164,656	2,686,472	16 31	25 30
Coyote.....	14,754	94,498	6 40	17 35
Ermine (weasel).....	386,034	189,936	0 49	1 25
Fisher or pekan.....	4,866	286,461	58 86	84 43
Fox, cross.....	3,100	158,380	51 09	63 81
Fox, red.....	18,137	210,626	11 61	22 29
Fox, silver.....	2,843	432,130	151 99	246 46
Fox, blue.....	121	9,287	76 75	69 82
Fox, white.....	21,416	741,551	34 62	39 92
Fox, other.....	61	258	4 22	14 38
Lynx.....	6,509	150,300	23 09	24 751
Marten or sable.....	47,292	1,081,871	22 87	32 73
Mink.....	117,561	968,582	8 23	13 48
Muskrat.....	2,015,481	2,505,375	1 24	2 54
Otter.....	10,931	262,670	24 02	26 15
Rabbit.....	6,577	1,449	0 22	0 39
Raccoon.....	18,116	55,266	3 05	6 56
Skunk.....	74,972	130,130	1 73	3 63
Squirrel, black.....	72	72	1 00	1 59
Squirrel, red.....	116	8	0 06	0 22
Wild cat.....	859	3,284	3 82	1
Wolf.....	5,316	50,522	9 50	15 69
Wolverine or carcajou.....	960	13,344	13 90	21 01
Caribou.....	64	455	7 10	10 91
Deer.....	4,884	7,419	1 51	2 32
Elk.....	16	41	2 56	3 10
Moose.....	980	3,812	3 88	5 14
Panther.....	17	89	5 23	6 59
Civet cat.....	77	17	0 22	0 50
House cat.....	198	52	0 26	0 47
<b>Canada.....</b>	<b>2,936,407</b>	<b>10,151,594</b>	<b>-</b>	<b>-</b>

<sup>1</sup>Wild cat included with lynx in 1919-20.

**FORESTRY.**

**Forest Areas of Canada.**—Canada's forest resources are included more or less roughly in three areas, (1) the giant fir forest of the Rocky Mountains and the Pacific Coast, (2) the northern coniferous forest, stretching in a wide curve from the Yukon, north of the Great Lakes to Labrador, and (3) the deciduous, hardwood forest, extending from Lake Huron through southern Ontario and Quebec to New Brunswick and the Atlantic coast. Varying precipitation, temperature, and soil are the causes resulting in such a division into forest areas. It is estimated that 932,416 square miles, about one quarter of the total area of the Dominion (3,729,665 square miles) is covered by forests, of which about 390,625 square miles can be considered as containing saw-timber of commercial size. Of this amount, some is at present inaccessible owing to lack of transportation.

**Types of Forest Growth.**—The most important types of forest growth found in the forests of British Columbia are: (1) Douglas Fir—a strong, hard and light wood highly valued on account of its strength and the large sizes in which it can be obtained. Trees reach heights exceeding 250 feet and diameters exceeding 8 feet. It is an important timber for structural purposes, ties, piles, mine timbers, wood-block paving, etc.; (2) Red Cedar—also a very large type of tree, noted for the durability of the wood, which is light, soft and straight-grained; it is the most important wood in Canada for the manufacture of roofing shingles; (3) Alaska Pine or Western Hemlock—a wood much superior to eastern types of hemlock, extensively used for pulp and structural purposes; (4) Sitka Spruce and Engelmann Spruce—with light, soft, and straight-grained wood, much used in aeroplane manufacture and for pulpwood.

In the northern coniferous forest some of the predominant types are: (1) White Spruce—a soft, light wood found over very wide areas, being excellent material for pulp and for construction work where durability is not important; (2) Balsam Fir—largely used for pulp and found over large areas; (3) Larch or Tamarack—a swamp species, partly destroyed by the larch saw-fly; its wood is much sought after for railway ties and shipbuilding purposes; (4) Black Spruce—the smallest of the spruce species and only used for pulpwood; (5) Jack Pine—found growing on poor sites and following more valuable species after forest fires; (6) Balm Poplar—a widely found, deciduous type, of little commercial value.

Of the most important types found between Lake Huron and New Brunswick, mention may be made of: (1) Yellow Birch—Canada's most important hardwood, used extensively for flooring, cabinet work, handles, etc., as it is hard, stiff, strong and takes a fine polish; (2) White Pine and Red Pine—much used for structural purposes but now almost entirely cut from many wooded districts; (3) Eastern Cedar—a small type much used for shingles, fence posts and railway ties; (4) other hardwoods, including Maple, Elm, Ash, Oak and Hickory.

**Forest Industries.**—The forests of Canada are mainly owned by the Dominion and Provincial Governments and are leased by them to lumber or pulp companies. During recent years, legislation has made the sawing of logs and the manufacture of pulp in Canada a condition of licenses to cut timber on crown lands, the province of Ontario even insisting on the pulpwood of the crown lands being manufactured into paper within the province. Such regulations, combined with the great natural advantages which Canada's water routes and abundant water power offer to the forest industries, have resulted in great increases in the size and operations of our pulp and paper companies.

The first paper mill in Canada was erected at St. Andrews, Que., in 1803. In 1825 Upper Canada's first paper mill was erected at Crook's Hollow, its owner receiving a bounty from the government for his successful efforts. By 1881 there were 5 pulp and paper mills in the Dominion, with an invested capital of \$92,000. By 1920, the number of incorporated companies manufacturing pulp had increased to 160 with a combined capital of \$221,472,538 (preliminary figures). Canada's exports of wood, pulp, and paper are next in value and importance to her exports of agricultural products, exports of unmanufactured wood amounting to \$116,260,591, of paper to \$92,103,307 and of manufactured wood to \$75,256,371 in the fiscal year ended March 31, 1921. The United States offers a permanent and convenient market for the greater part of the products of this industry.

In the year 1919, the group of industries using timber and lumber as their chief raw material comprised 4,966 establishments, with a capital amounting to \$395,808,490, and a product for the year valued at \$354,617,529. These industries paid \$12,734,049 in salaries to 8,608 salaried employees, and \$82,492,121 in wages to 101,215 wage-earners.

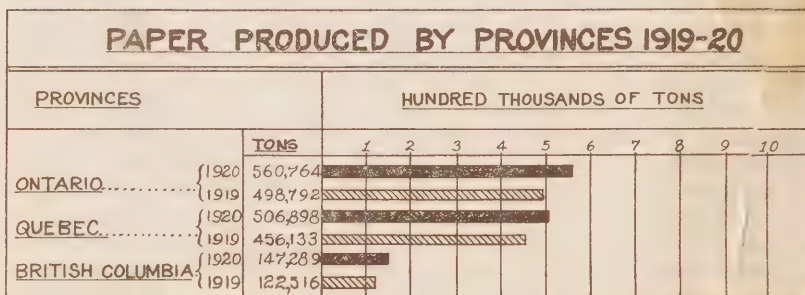
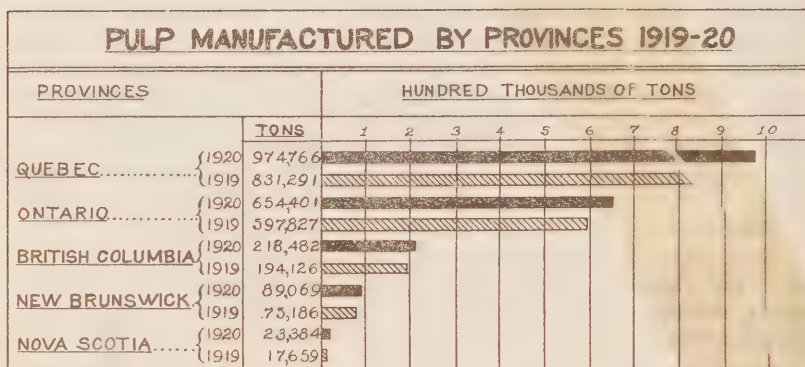
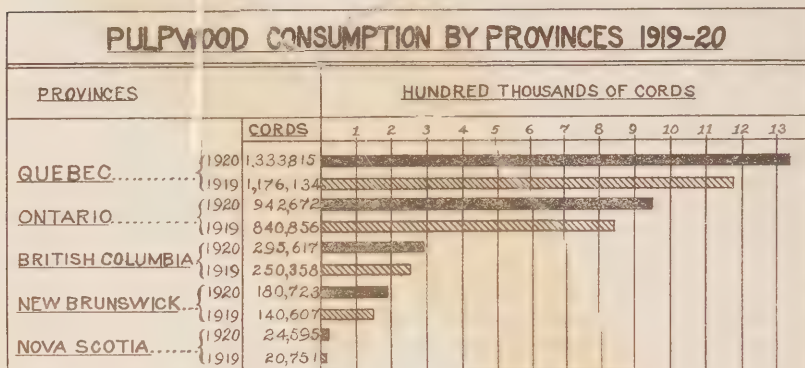
**N.B.**—Much of the above information is taken from a publication of the Dominion Forestry Branch, Department of the Interior, Ottawa, entitled "The Forests of Canada," in which much valuable material is available.

**Statistics of Forest Products.**—Up to and including the year 1916 the annual statistics of forest products were collected and published by the Forestry Branch of the Department of the Interior. For the calendar years 1917 to 1920 such statistics have been collected and compiled by the Dominion Bureau of Statistics in collaboration with the Forestry Branch of the Department of the Interior, and have formed part of the annual census of industry. Summarized statistics of the estimated values of forest products are given in Table 63, while quantities and values of the cut of lumber, shingles and lath are furnished by provinces in Table 64. Statistics of production in the great pulp and paper industry are presented in Tables 65 to 70, while the three diagrams on page 316 illustrate graphically by provinces the production in Canada during 1919 and 1920 of (1) pulpwood, (2) wood pulp and (3) paper. To the statistics of production are



appended two tables showing (Table 71) the quantity and value of exports of wood pulp by countries, for the fiscal years 1916-1921, and (Table 72) the quantity and value of wood, blocks and other, exported to United States for the fiscal years 1904-1921.

Diagrams Illustrating the Paper-making Industry.



## 63.—Summary Statistics of Forest Products, 1917-1920.

Variety of Timber.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$
Lumber, lath and shingles.....	93,914,330	113,254,684	138,041,851	188,312,475
Firewood.....	27,500,000	26,500,000	25,000,000	27,500,000 <sup>2</sup>
Pulpwood.....	29,361,113	43,302,913	45,433,056	67,156,870
Cross-ties.....	9,500,000	9,369,520	9,446,182	12,183,440 <sup>2</sup>
Square timber exported.....	1,325,192	1,402,871	2,148,162	1,899,444
Cooperage.....	1,703,977	1,496,205	1,392,365	812,573 <sup>2</sup>
Poles.....	600,000	613,000	—	893,434 <sup>2</sup>
Logs exported.....	824,155	510,202	—	1,836,315
Tanning materials.....	150,000	680,000	—	711,000 <sup>2</sup>
Round mining timbers.....	195,000	211,292	—	535,551 <sup>2</sup>
Miscellaneous exports.....	1	500,000	—	975,544
Miscellaneous products.....	11,426,945	11,707,254	5,335,257	3,843,968
<b>Total.....</b>	<b>176,500,712</b>	<b>209,547,941</b>	<b>230,913,598</b>	<b>306,660,619</b>

<sup>1</sup>Included in "miscellaneous products."    <sup>2</sup>Subject to revision.

## 64.—Quantities and Values of the cut of Lumber, Shingles and Lath by Provinces, 1918, 1919 and 1920.

Province.	Lumber.		Shingles.		Lath.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
<b>1918.</b>	<b>M ft. b.m.</b>	<b>\$</b>	<b>M</b>	<b>\$</b>	<b>M</b>	<b>\$</b>
Prince Edward Island.....	6,393	136,336	8,948	21,466	805	2,901
Nova Scotia.....	176,332	4,092,039	19,138	49,633	16,459	41,639
New Brunswick.....	442,625	12,189,312	170,486	512,812	117,521	328,554
Quebec.....	841,084	20,916,604	249,160	775,058	78,633	214,711
Ontario.....	1,110,062	34,168,754	52,393	183,728	148,999	506,516
Manitoba.....	54,047	1,240,052	—	—	8,698	22,764
Saskatchewan.....	75,835	2,122,307	—	—	17,244	73,490
Alberta.....	22,388	473,694	212	577	—	—
British Columbia.....	1,157,636	28,351,207	2,162,184	6,641,174	49,741	179,041
Yukon.....	229	10,315	—	—	—	—
<b>Total.....</b>	<b>3,886,631</b>	<b>103,700,620</b>	<b>2,662,521</b>	<b>8,184,448</b>	<b>438,100</b>	<b>1,369,816</b>
<b>1919.</b>						
Prince Edward Island.....	8,971	238,687	8,340	26,694	1,244	4,432
Nova Scotia.....	225,074	6,262,745	13,677	59,859	15,261	65,974
New Brunswick.....	497,593	16,477,477	329,313	1,248,623	144,820	636,058
Quebec.....	916,422	30,195,646	312,926	1,346,146	134,035	500,327
Ontario.....	940,199	33,671,384	97,573	477,269	163,582	673,381
Manitoba.....	30,353	937,679	160	1,280	7,557	32,618
Saskatchewan.....	42,452	1,326,688	—	—	7,856	41,245
Alberta.....	26,173	696,518	525	4,375	100	425
British Columbia.....	1,175,151	32,540,244	2,150,630	10,360,099	45,748	203,298
Yukon.....	253	12,680	—	—	—	—
<b>Total.....</b>	<b>3,830,831</b>	<b>122,359,748</b>	<b>2,915,149</b>	<b>13,524,345</b>	<b>520,203</b>	<b>2,157,753</b>
<b>1920.</b>						
Prince Edward Island.....	6,241	243,883	8,871	32,529	1,151	7,270
Nova Scotia.....	273,987	9,466,984	13,635	56,554	30,807	196,501
New Brunswick.....	515,785	18,374,126	260,077	1,321,311	219,060	1,464,499
Quebec.....	916,422	37,128,201	387,813	1,839,595	160,326	950,137
Ontario.....	992,901	43,147,777	43,739	226,703	222,734	1,740,434
Manitoba.....	58,419	2,058,590	123	475	7,704	52,720
Saskatchewan.....	54,371	2,074,621	1,803	9,105	13,025	104,199
Alberta.....	41,229	1,480,186	3,788	17,888	—	—
British Columbia.....	1,443,270	54,394,069	2,135,587	11,190,999	107,224	733,119
Yukon.....	—	—	—	—	—	—
<b>Total.....</b>	<b>4,302,625</b>	<b>168,368,437</b>	<b>2,855,706</b>	<b>14,695,159</b>	<b>762,031</b>	<b>5,248,879</b>

NOTE.—M ft. b.m. signifies 1,000 feet board measure.

## 65.—Total Consumption and Value of Pulpwood, 1909-20.

Year.	Total Consumption.	Total Value.	Year.	Total Consumption.	Total Value.
	Cords.	\$		Cords.	\$
1909.....	622,129	3,464,080	1915.....	1,405,836	9,426,217
1910.....	598,487	3,585,154	1916.....	1,764,912	13,104,458
1911.....	672,288	4,338,024	1917.....	2,104,334	18,817,483
1912.....	866,042	5,215,582	1918.....	2,210,744	24,886,475
1913.....	1,109,034	7,243,368	1919.....	2,428,706	31,347,686
1914.....	1,224,376	8,089,868	1920.....	2,777,422	45,404,889

## 66.—Quantities and Values of Wood used in the Manufacture of Pulp, 1918-1920.

Province.	Wood used.	Value.	Average Value per cord.	Pulp Produced.	Number of firms reporting.
1918.	Cords.	\$	\$	Tons.	No.
Quebec.....	1,085,473	11,061,191	10-19	802,030	27
Ontario.....	784,691	10,395,717	13-25	505,366	21
New Brunswick.....	110,133	920,854	8-36	66,619	5
Nova Scotia.....	11,668	73,816	6-32	10,017	5
British Columbia.....	218,774	2,434,897	11-13	173,161	6
<b>Total.....</b>	<b>2,210,744</b>	<b>24,886,475</b>	<b>11-25</b>	<b>1,557,193</b>	<b>64</b>
1919.					
Quebec.....	1,176,134	13,830,734	11-76	831,291	29
Ontario.....	840,856	13,113,794	15-60	597,827	22
New Brunswick.....	140,607	1,459,942	10-38	75,186	5
Nova Scotia.....	20,751	153,519	7-40	17,659	5
British Columbia.....	250,358	2,789,697	11-15	194,126	5
<b>Total.....</b>	<b>2,428,706</b>	<b>31,347,686</b>	<b>12-91</b>	<b>1,716,089</b>	<b>66</b>
1920.					
Quebec.....	1,333,815	20,628,246	15-46	974,766	30
Ontario.....	942,672	17,131,849	18-17	654,401	20
New Brunswick.....	180,723	2,553,613	14-13	89,069	5
Nova Scotia.....	24,595	301,161	12-24	23,384	6
British Columbia.....	295,617	4,790,020	16-20	218,482	6
<b>Total.....</b>	<b>2,777,422</b>	<b>45,404,889</b>	<b>16-34</b>	<b>1,960,102</b>	<b>67</b>

## 67.—Kinds of Wood used in the Manufacture of Pulp by Quantities and Values, 1918, 1919 and 1920.

Kinds of Wood.	1918.			1919.			1920.		
	Quantity.	Value.	Average Value.	Quantity.	Value.	Average Value.	Quantity.	Value.	Average Value.
	Cords.	\$	\$	Cords.	\$	\$	Cords.	\$	\$
Spruce.....	1,638,733	18,887,125	11-53	1,787,868	23,673,783	13-24	1,873,024	31,653,419	16-89
Balsam Fir...	447,243	4,604,987	10-29	490,327	6,077,368	12-39	687,519	10,504,538	15-28
Hemlock.....	89,007	1,038,867	11-67	118,013	1,221,222	10-34	176,029	2,668,630	15-16
Poplar.....	9,885	100,987	10-22	7,228	98,413	13-61	5,732	75,417	13-16
Jack Pine.....	25,851	254,384	9-84	5,402	149,844	9-72	15,743	168,400	10-70
All other.....	25	125	5-00	9,868	127,056	12-89	19,375	334,485	17-26
<b>Total.....</b>	<b>2,210,744</b>	<b>24,886,475</b>	<b>11-26</b>	<b>2,428,706</b>	<b>31,347,686</b>	<b>12-90</b>	<b>2,777,422</b>	<b>45,404,889</b>	<b>16-34</b>

## 63.—Quantities of Wood used and of Pulp manufactured, 1916-1920.

## WOOD USED.

Process of Manufacture.	Quebec.	Ontario.	New Brunswick.	Nova Scotia.	British Columbia.	Total.
	Cords.	Cords.	Cords.	Cords.	Cords.	Cords.
Mechanical.....	1916 448,938	308,416	7,154	14,437	48,313	827,258
	1917 —	—	—	—	—	964,479
	1918 488,765	291,767	6,825	11,668	73,699	872,724
	1919 543,009	364,681	7,635	20,751	74,361	1,010,457
	1920 569,560	391,458	6,188	24,595	88,817	1,080,618
Sulphite.....	1916 285,761	309,060	72,440	—	60,684	727,945
	1917 —	—	—	—	—	855,489
	1918 377,792	470,276	77,290	—	119,699	1,045,057
	1919 410,115	456,866	102,106	—	158,572	1,127,659
	1920 498,592	530,844	147,570	—	177,017	1,354,023
Sulphate.....	1916 181,818	20,136	—	—	—	201,954
	1917 —	—	—	—	—	274,646
	1918 212,613	21,187	26,018	—	25,376	285,194
	1919 216,099	16,970	30,866	—	17,425	281,360
	1920 255,685	18,474	26,965	—	29,783	330,907
Soda.....	1916 7,755	—	—	—	—	7,755
	1917 —	—	—	—	—	9,720
	1918 6,308	1,461	—	—	—	7,769
	1919 6,891	2,339	—	—	—	9,230
	1920 9,978	1,896	—	—	—	11,874
All processes.....	1916 924,272	637,612	79,594	14,437	108,997	1,764,912
	1917 —	—	—	—	—	2,104,334
	1918 1,085,478	784,691	110,133	11,668	218,774	2,210,744
	1919 1,176,134	840,856	140,607	20,751	250,358	2,428,706
	1920 1,333,815	942,672	180,723	24,595	295,617	2,777,422

NOTE.—For 1917, statistics are not available by provinces.

## PULP MANUFACTURED.

Process of Manufacture.	Quebec.	Ontario.	New Brunswick.	Nova Scotia.	British Columbia.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Mechanical.....	1916 448,938	308,416	7,154	14,437	48,313	827,258
	1917 519,891	310,620	7,245	20,355	65,620	923,731
	1918 466,355	277,922	6,463	10,017	91,588	879,510
	1919 515,457	351,572	6,447	17,659	99,767	990,902
	1920 558,149	393,582	6,225	23,384	108,774	1,090,114
Sulphite.....	1916 142,880	154,530	36,220	—	30,342	363,972
	1917 148,859	165,173	43,009	—	43,392	400,433
	1918 180,972	216,255	30,766	—	66,329	494,322
	1919 185,494	235,122	56,612	—	84,887	562,115
	1920 263,876	249,022	70,369	—	92,466	675,733
Sulphate.....	1916 90,909	10,068	—	—	—	100,977
	1917 111,924	12,981	8,086	—	2,863	135,854
	1918 124,507	10,459	29,390	—	15,244	179,600
	1919 126,945	9,931	12,127	—	9,472	158,475
	1920 147,903	10,867	12,475	—	17,242	188,487
Soda.....	1916 3,877	—	—	—	—	3,877
	1917 3,576	560	—	—	—	4,136
	1918 3,031	730	—	—	—	3,761
	1919 3,395	1,202	—	—	—	4,597
	1920 4,838	930	—	—	—	5,768
All processes.....	1916 686,604	473,014	43,374	14,437	78,655	1,296,084
	1917 784,250	489,488	58,340	20,355	111,875	1,464,308 <sup>1</sup>
	1918 802,030	505,366	66,619	10,017	173,161	1,557,193
	1919 831,291	597,827	75,186	17,659	194,126	1,716,089
	1920 974,766	654,401	89,069	23,384	218,482	1,960,102

<sup>1</sup>Includes 154 tons described as other fibre.



**69.—Tonnage and Value of the Various Kinds of Paper Produced in Canada by Provinces, Calendar year 1920.**

Kinds of Paper.	In Paper Mills.		In Pulp and Paper Mills.		In all Mills Making Paper.	
	Quantity.	Selling Value.	Quantity.	Selling Value.	Quantity.	Selling Value.
	Tons.	\$	Tons.	\$	Tons.	\$
<b>Quebec—</b>						
Newsprint.....	3,297	534,975	354,888	35,354,450	358,185	35,889,425
Book and writing.....	16,423	7,902,279	7,707	1,380,167	24,130	9,282,446
Wrapping.....	6,655	1,059,253	42,050	6,681,694	48,705	7,740,947
Boards.....	19,424	1,448,635	44,261	4,207,628	54,685	5,656,263
Other papers and paper products.....	—	2,847,472	—	1,070,902	—	3,918,374
<b>Total.....</b>	<b>—</b>	<b>13,792,614</b>	<b>—</b>	<b>48,694,841</b>	<b>—</b>	<b>62,487,455</b>
<b>Ontario—</b>						
Newsprint.....	1,764	345,878	379,179	32,331,828	380,943	32,677,706
Book and writing.....	35,438	8,505,567	13,628	4,080,794	49,066	12,586,361
Wrapping.....	3,249	759,812	14,617	2,252,385	17,866	3,012,197
Boards.....	22,861	2,239,520	80,495	5,008,879	103,356	7,248,399
Other papers and paper products.....	—	1,458,088	—	2,664,718	—	4,122,806
<b>Total.....</b>	<b>—</b>	<b>13,308,865</b>	<b>—</b>	<b>46,338,604</b>	<b>—</b>	<b>59,647,489</b>
<b>British Columbia—</b>						
Newsprint.....	—	—	136,568	12,298,140	136,568	12,298,140
Book and writing.....	—	—	—	—	—	—
Wrapping.....	—	—	10,721	1,408,159	10,721	1,408,159
Boards.....	—	—	—	—	—	—
Other papers and paper products.....	—	—	—	798,708	—	798,708
<b>Total.....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>14,505,007</b>	<b>—</b>	<b>14,505,007</b>
<b>Canada—</b>						
Newsprint.....	5,061	880,853	870,635	79,984,418	875,696	80,865,271
Book and writing.....	51,861	16,407,846	21,335	5,460,961	73,196	21,868,807
Wrapping.....	9,904	1,819,065	67,388	10,342,238	77,292	12,161,303
Boards.....	33,285	3,688,155	124,756	9,216,507	158,041	12,904,662
Other papers and paper products.....	—	4,305,560	—	4,534,328	—	8,839,888
<b>Total.....</b>	<b>—</b>	<b>27,101,479</b>	<b>—</b>	<b>109,538,452</b>	<b>—</b>	<b>136,639,931</b>

**70.—Production of Paper by Provinces, 1917-1920.**

Province.	1917.	1918.	1919.	1920.
	Tons.	Tons.	Tons.	Tons.
Ontario.....	383,555	425,228	498,792	560,764
Quebec.....	391,130	419,980	456,133	506,898
British Columbia.....	79,004	122,516	135,310	147,289
<b>Total.....</b>	<b>853,689</b>	<b>937,724</b>	<b>1,090,235</b>	<b>1,214,951</b>

## 71.—Exports from Canada of Wood Pulp, by Countries, in the fiscal years 1916-1921.

Kinds.	1916.			1917.		
	Quantity.	Value.	Average value per cwt.	Quantity.	Value.	Average value per cwt.
	Cwt.	\$	\$ cts.	Cwt.	\$	\$ cts.
Chemical pulp—						
United Kingdom.....	19,023	36,777	1 93	668,750	2,677,923	4 00
United States.....	3,288,816	6,405,616	1 95	3,952,560	11,107,819	2 81
Japan.....	182,510	349,639	1 92	100,426	204,417	2 04
Other countries.....	4,467	8,979	2 01	12,241	42,761	3 49
<b>Total.....</b>	<b>3,494,816</b>	<b>6,801,011</b>	<b>1 95</b>	<b>4,733,997</b>	<b>14,032,920</b>	<b>2 96</b>
Mechanical pulp—						
United Kingdom.....	362,531	299,264	0 83	494,474	379,488	0 77
United States.....	3,875,972	2,967,153	0 76	5,495,221	5,487,424	1 00
France.....	410,200	308,750	0 75	626,285	471,040	0 75
Other countries.....	500	370	0 74	35,934	33,181	0 92
<b>Total.....</b>	<b>4,649,203</b>	<b>3,575,537</b>	<b>0 77</b>	<b>6,651,914</b>	<b>6,371,133</b>	<b>0 96</b>
	1918.			1919.		
Chemical pulp—						
United Kingdom.....	343,436	1,603,738	4 67	140,364	611,399	4 36
United States.....	4,681,723	16,171,096	3 45	7,414,825	26,256,265	3 54
Japan.....	329,783	1,233,306	3 74	639,997	2,775,486	4 34
Other countries.....	30,013	125,673	4 18	137,744	583,706	4 24
<b>Total.....</b>	<b>5,385,010</b>	<b>19,133,813</b>	<b>3 55</b>	<b>8,332,930</b>	<b>30,226,855</b>	<b>3 53</b>
Mechanical pulp—						
United Kingdom.....	—	—	—	2,528	3,033	1 20
United States.....	4,311,694	6,487,097	1 50	3,453,149	4,418,555	1 28
France.....	—	—	—	—	—	—
Other countries.....	—	—	—	53,049	58,327	1 10
<b>Total.....</b>	<b>4,311,694</b>	<b>6,487,097</b>	<b>1 50</b>	<b>3,503,726</b>	<b>4,479,915</b>	<b>1 28</b>
	1920.			1921.		
Chemical pulp—						
United Kingdom.....	846,171	3,212,119	3 80	863,797	4,425,148	5 12
United States.....	6,830,736	25,550,882	3 74	7,466,837	46,449,938	6 22
Japan.....	802,385	3,709,968	4 62	374,354	1,784,380	6 76
Other countries.....	122,650	527,094	4 30	375,956	2,400,753	6 38
<b>Total.....</b>	<b>8,501,942</b>	<b>33,000,063</b>	<b>3 84</b>	<b>9,080,964</b>	<b>55,060,219</b>	<b>6 06</b>
Mechanical pulp—						
United Kingdom.....	1,938,225	1,802,281	0 93	1,397,783	3,472,454	2 48
United States.....	4,045,385	5,765,871	1 42	3,240,633	11,516,607	3 55
France.....	799,794	808,257	1 01	548,246	1,332,291	2 43
Other countries.....	4,236	7,010	1 65	95,380	170,466	1 79
<b>Total.....</b>	<b>6,787,640</b>	<b>8,383,419</b>	<b>1 23</b>	<b>5,282,042</b>	<b>16,491,818</b>	<b>3 12</b>

## 72.—Quantity and Value of Wood, Blocks and Other, for Pulp, exported to the United States, 1904-1921.

Fiscal Year.	Cords.	\$	Fiscal Year.	Cords.	\$
1904.....	479,238	1,788,049	1913.....	1,003,594	6,806,445
1905.....	593,624	2,600,814	1914.....	1,089,334	7,388,770
1906.....	614,286	2,649,106	1915.....	1,010,914	6,817,311
1907 (9 mos.).....	452,846	1,998,805	1916.....	879,934	5,743,847
1908.....	901,861	4,655,371	1917.....	982,671	6,448,189
1909.....	794,986	4,356,391	1918.....	1,002,127	8,339,278
1910.....	965,271	6,076,628	1919.....	1,597,042	15,386,600
1911.....	936,791	6,092,715	1920.....	838,732	8,454,803
1912.....	879,775	5,697,901	1921.....	1,615,467	21,513,594

**FISHERIES.**

**The Early Fisheries.**—Sea fisheries largely depend upon two habits of fish—those of spawning and feeding in their accustomed resorts in estuaries and the open sea. In Canada the feeding grounds are northerly and are remarkable for the coldness and purity of their waters. The earliest frequenters of the “banks”, especially of the “Grand Bank”, were Breton and Basque fishermen who, according to Fernandez de Navarrete, came in their small vessels before 1502. The fishing was done by hand line from barrels made fast outside of the bulwarks, so that the lines would not foul on the sides of the ship. The vessels remained on the “bank” as long as fine weather lasted, then returned to France with their catches of from 30 to 50 thousand cod. Voyages up and down the coast soon showed that cod were as plentiful inshore as on the outer banks, and so it became common for a crew to anchor in a bay, build a hut on shore and make daily excursions in small boats to the inshore fisheries. Such an establishment was at Tadoussac, founded by Chauvin in 1599. The fish was salted and dried on shore, and at the end of the season was loaded into the ship to be taken to France. Soon the fishermen stayed all winter in America and built the first fishing villages. By the Treaty of Utrecht in 1713 Britain became absolute owner of Newfoundland, excluding France from the rights of fishing and drying fish on certain sections of its coast, but France retained the fisheries of Cape Breton and the Gulf. The Seven Years War put a stop to continuous fishing. At its conclusion, the Robin family of Jersey came to Canada and by gradual acquisition came to control all the former French fishing stations. The firm of Charles Robin and Company devoted itself to the capture of cod, so that until the arrival of the Loyalists all other fish were neglected. Inshore fisheries only were developed, the Labrador coast fisheries being included under this term; no deep-sea fishing vessel put out from Lunenburg, which is now the chief centre of the deep-sea fishery, until 1873.

**Methods of Fishing.**—The fisheries of Canada are distinguished as Atlantic, Inland and Pacific. Of the annual yield, the Atlantic fisheries give 45 per cent, the Pacific 42 per cent and the Inland 13 per cent.

Sea fisheries are for convenience described as inshore and deep-sea. Of the inshore fisheries those from one to five miles out are frequented by boats carrying two or three men and those twelve to fifteen miles out by small vessels carrying from four to seven men. The fish are largely taken with gill net and trawl. A gill net hangs like a wall in the water, buoyed and weighted to keep it upright. The fish in trying to pass through are meshed by the gills and strangled. A trawl is a line of any length to which are attached at intervals short lines or snoods, each one with a baited hook at the end. The deep-sea fisheries are worked by vessels of from sixty to one hundred tons, carrying from twelve to twenty men. Dorries are carried on board which, when the vessel anchors, are sent out with two men in each who use trawls to take the fish—cod, haddock, hake and halibut. The inshore fisheries allow a man to farm as well as fish. This, added

to their greater safety, gives them a following eight times as great as the deep-sea fisheries.

**Atlantic Fisheries.**—On the Atlantic coast a great proportion of the cod is taken inshore because the fish taken out at sea has to be so heavily salted. During the spring and summer cod fishermen take haddock, splitting and salting it with the rest of their catch. But the important haddock season comes in the autumn when the fish are shipped fresh or else smoked and sold as finnan haddie. Halibut, herring, sardines (young herring) and mackerel are of less importance. Then there are oysters which used to be plentiful anywhere on the coast from Halifax to the Bay of Chaleur, but the production has fallen off from 64,646 barrels in 1884 to 14,526 in 1920. Lobsters, which formerly were little valued, are now, next to cod, the most valuable product of the Atlantic fisheries. This change came in the late 60's with the introduction of lobster canning into Canada. In 1869, 61,000 one pound cans were put up, increasing to 17,000,000 in 1881, following which the production fell to 7,838,352 cans in 1920. The reason for the decrease is found chiefly in the difficulty of enforcing restrictions regarding the capture of undersized or spawning lobsters.

**Inland Fisheries.**—Of the inland fishes the salmon of Quebec is very important, principally as a game fish. Its habitat formerly extended to the rivers flowing into lake Ontario, but before 1870 it practically ceased to frequent them. Salmon is now found in the rivers from Labrador to the Bay of Fundy. Any financial profit from the fishery comes chiefly from the fees of sportsmen. The most important inland commercial fish is whitefish, which is found in the Great Lakes and lake Winnipeg and its tributaries. When the fisheries were first developed in the Great Lakes, whitefish were so plentiful and so easily captured that large quantities were used as fertilizer. Overfishing showed its effect, for from 7,595,690 in 1890 the Canadian Great Lakes' catch fell to 2,895,170 pounds in 1905. The catch has risen to 6,978,600 pounds for 1920, the principal increases being shown for lake Erie and lake Ontario, which were stocked from the Sandwich hatchery. To the west and north of lake Winnipeg are great inland fisheries abounding in whitefish, dore and lake trout, which as yet are very slightly developed.

**Pacific Fisheries.**—The conformation of the British Columbia coast is especially suitable for fisheries. The shore line is made irregular by many deep fjords and estuaries, and from the coast a feeding ground for fish in the shape of a sea ledge runs out from 50 to 100 miles before dropping away to ocean depths. Before there was any regular settlement in British Columbia, the Hudson Bay Company relied upon dried salmon to support its employees during the winter.

The salmon of the British Columbia coast is not the true salmon, although not unlike it in appearance. The real difference between the two is shown in their spawning habits—the British Columbia salmon never returns to the sea after spawning once, but weakens and dies at the headwaters of the rivers. There are five varieties



of British Columbia salmon. Of these the sockeye is now the chief fish of the canneries, because of its fine quality and its even colour. In the Fraser river the great runs of sockeye distinguish every fourth year as a "big" year, a very striking feature in that river. The sockeye on their way to the Fraser river are caught by American fishermen in Puget Sound. Thus the catch in the Fraser is falling off, but in the northern rivers where there is no interference the runs are fairly uniform. The spring or quinnat salmon follows the sockeye in importance, having been for many years the only Pacific salmon used for canning. The coho, also, has been used for canning, and lately the dog salmon has been salted by the Japanese for shipment to the Orient. The humpback, one of the smaller varieties, is less valued. The great development of the salmon industry has brought about the use of cohoes and humpbacks to make out the supply of sockeyes in the poor years, and coming, as they do at different seasons, has given more continuous employment to the fishermen. While the Hudson's Bay Company had for more than half a century packed salted salmon for shipment in barrels to Australia, the Sandwich islands, and elsewhere, the first canning on any large scale took place in 1873, when two canneries on the Fraser river packed 8,580 cases. The pack has risen to 1,188,381 cases in 1920, or taking a "big" year, 1917, 1,556,485 cases.

For many years the accessibility of the salmon fishery induced the neglect of all others. About 1890 the fishery for halibut was begun, but in its first years poor transportation facilities prevented it from competing with Atlantic halibut. But from 9,025,182 pounds in 1899 the Atlantic catch fell to 1,690,478 pounds in 1908 and in the same period the Pacific catch rose from 6,877,640 to 17,512,555 pounds. The same methods are used on both coasts, for many of the Pacific coast halibut men formerly operated out of Boston and Gloucester when halibut was more plentiful in those waters. The halibut is a migratory fish, so it is impossible to name any fishery in which it is most abundant.

Fish of less importance are herring, sturgeon, cod and anchovy. Then there is the whale fishery which has been organized in recent years with four stations, two on Vancouver island and two on the Queen Charlotte islands. The yearly catch of about 500 includes whales of many kinds—sulphur-bottom, finback, and humpback with an occasional sperm whale. Whale hunting is carried on in fast boats with Svend Foyn harpoon guns—a method which was introduced from Norway. Every scrap of the whale is used—oil, whalebone, and guano are its products and to an increasing extent, "salted beef".

During the period following 1896, which is generally accounted a period of great industrial expansion, the fisheries of Canada made very slight advances. From \$20,407,425 in 1896 their value increased to \$29,965,433 in 1910-11, but during the period the number of men in the industry actually fell off. Even before 1896 the salted fish industry had become non-progressive and new developments came only with encouragement to the fresh fish and frozen fish industry. Beginning in 1907 the Department of Marine and Fisheries arranged to

pay one-third of the express charges on less than car-lot shipments of fresh fish from Halifax and Port Mulgrave. Previously the shorter haul from Gloucester and Boston had allowed American fresh fish to enjoy the Canadian market free from competition. As a result, shipments of fresh cod, which in 1900 had been practically nil and only 12,389 cwts. in 1905, advanced to 43,548 cwts. in 1910 and 202,235 in 1918. But following the removal of government aid the shipments have fallen to 166,530 cwts. in 1919 and 118,755 in 1920.

The Government has always pursued the policy of protecting Canadian fisheries. Close seasons were long enforced to prevent the capture of spawning fish or where a bed, say of oysters, is seriously depleted it may be left idle for a period. When licenses are issued occasion is taken to specify the minimum size of the fish to be captured and the size of mesh in the nets. But these regulations have lost much of their efficacy because some of Canada's principal fishing grounds are shared with the United States, whose fishermen do not feel bound to observe the restrictions under which Canadians operate. The full force of fisheries regulation does not extend beyond territorial waters.

**Fishing Bounties.**—Under what is known as the Halifax Award, made on November 23, 1877, a sum of \$4,500,000 was paid by the United States to Canada as compensation for the use of the Canadian fisheries by American fishermen. Later, in an Act of 1882 (45 Vict., c. 18), passed for the development of the sea fisheries and encouragement of the building of fishing vessels, provision was made for distributing annually \$150,000 in bounties, representing the interest on the above sum, among the owners of fishing vessels and among the fishermen engaged in fishing from boats in the deep sea fisheries of Canada. An Act of 1891, (54-55 Vict., c. 42), increased the amount to \$160,000, the details of the expenditure being settled each year by Order in Council. For the year 1920, payment was made on the following basis: to owners of vessels entitled to receive bounty, \$1 per registered ton, not to exceed \$80; to vessel fishermen entitled to receive bounty, \$7.60 each; to owners of boats measuring not less than 13 feet keel \$1 per boat; to boat fishermen entitled to receive bounty, \$6.10 each. The claims received numbered 9,671 of which 9,664 were paid as compared with 13,068 received and 13,061 paid in the previous year. The total amount paid was \$152,519. Details of the distribution of bounties are given for the years 1917 to 1920 in Table 75.

**Fish Culture.**—Government assistance to the fishing industry takes various forms. For many years the government has conducted fish hatcheries with a view to restocking the waters which have been overfished. In 1920 there were in operation 35 main hatcheries, 11 subsidiary hatcheries and 6 salmon retaining ponds, from which the total distribution during the year amounted to no less than 750,386,790 eggs, fry and older fish, including 418,290,750 whitefish distributed mainly in Ontario and Manitoba, but also in British Columbia, and 145,753,600 pickerel, distributed in Ontario and Manitoba. Sockeye salmon to the number of 90,175,369 were distributed in British

Columbia. In the season of 1921 the total distribution had increased to 845,856,651 individuals, mainly fry, including 534,895,800 white-fish, 165,625,000 pickerel and 84,789,624 sockeye salmon. The expenditure for this service in 1920-21 was \$364,789.

Stations under the direction of the Biological Board of Canada for the conduct of biological research into the numerous complex problems furnished by the fisheries are established at St. Andrews, N.B., and Nanaimo, B.C., the former having a permanent paid staff of 8 persons, while nearly 20 scientists conducted investigation there in the summer of 1920. Toronto, McGill, Queens, Manitoba, British Columbia and the chief Maritime Province Universities send to both stations able workers, chiefly professors and trained specialists. The life-histories of edible fishes, the bacteriology of fresh and cured fish, improved method of handling and preparing fish, and numerous other practical problems have been taken up. Scientific memoirs and reports are issued each season.

**Transportation and Marketing of Fish.**—During the war it became desirable to increase as far as possible the consumption of fish, reserving the less perishable animal foods for export to our allies. The government therefore undertook to provide for the rapid transit of sea fish on its railway lines to the markets of the inland provinces, and to stimulate by a publicity campaign the consumption of fish. Though much was accomplished in this direction, the annual per capita consumption of fish in Canada is even now estimated by the Fisheries Branch of the Department of Marine and Fisheries at not more than 20 pounds, a low figure considering Canada's position as a fish producing country. The Fisheries Branch has made efforts to improve the fast freight service from the Atlantic coast to Montreal and Toronto. Assurances have been given that the Canadian National fast freight from Halifax and Mulgrave will reach Montreal in about 64 hours from Halifax and 72 from Mulgrave, and that Toronto will be reached via the Grand Trunk fast freight within 36 hours from Montreal.

**Capital Invested.**—In the calendar year 1920 the total capital invested in fishing vessels, boats, nets, traps, etc., used in the fisheries of Canada, amounted to \$50,405,478 as compared with \$54,694,026 in the preceding year. These figures include, contrary to the practice of former years, investments in fish canning and curing establishments valued at \$20,512,265 in 1920 as compared with \$23,200,874 in 1919. The decline in values is in both cases due to deflation and the lower valuations set upon property rather than to any actual decline in physical quantity. Of the total for 1920, \$25,507,054 was invested in connection with sea fisheries and \$4,306,159 in connection with inland fisheries. Table 73 shows the distribution of capital amongst the various descriptions of vessels, boats, nets, traps, etc., used in both sea and inland fisheries, and in fish canning and curing establishments, for



the calendar years 1919 and 1920. A statement of the value of vessels, boats and fishing materials for each of the years 1880 to 1910-11 was given in the Year Book for 1911, page 390. For subsequent years similar information has appeared in the Year Book annually.

**Number of Employees.**—The total number of persons employed in the fisheries of Canada in the calendar year 1920, as shown by Table 74, was 75,696 as compared with 86,160 in 1919 and 87,070 in 1918. Of the number in 1920, 49,594 were engaged in sea fisheries, 7,603 in inland fisheries and 18,499 in fish canning and curing establishments.

**Production and Value of Fisheries.**—The total value of the products of the Canadian fishing industry in the calendar year 1920 was \$49,241,339 as compared with \$56,508,479 in 1919 and \$60,250,544, the largest value on record, in 1918. The decline in 1920 is shown by Table 76 to have been due in the main to decline in quantity rather than decline in price, this decline in quantity being specially noticeable in the case of salmon and cod, while in the case of halibut a decline in value has been due to lower prices.

**73.—Number and Capital Value of Fishing Vessels, Boats, Nets, Traps, etc., used in the Fisheries of Canada, 1919 and 1920.**

Equipment.	1919.		1920.	
	Number.	Value.	Number.	Value.
		\$		\$
<b>Sea Fisheries—</b>				
Steam trawlers.....	10	1,075,000	9	850,000
Steam fishing vessels.....	27	551,000	31	688,800
Sailing and gasoline vessels.....	1,191	5,243,795	1,046	5,783,914
Boats (sail and row).....	16,874	925,755	12,320	821,660
Boats (gasoline).....	15,361	5,430,046	14,611	6,011,490
Carrying smacks.....	529	575,975	299	348,260
Gill nets, seines, trap and smelt nets, etc.....	144,605	4,306,899	94,158	4,544,019
Weirs.....	808	1,088,140	1,054	774,380
Trawls.....	27,062	567,257	26,599	497,294
Hand lines.....	76,761	134,431	63,029	119,534
Crab traps.....	4,000	24,000	4,500	27,000
Oyster plant and equipment.....	1	20,500	1	19,360
Lobster traps.....	1,203,571	1,744,261	1,290,639	1,879,619
Fishing piers and wharves.....	2,773	2,031,570	2,617	1,375,650
Freezers and ice-houses.....	827	2,354,635	640	670,469
Small fish and smoke houses.....	8,092	1,212,948	7,524	1,095,605
<b>Total value.....</b>	<b>-</b>	<b>27,306,212</b>	<b>-</b>	<b>25,507,054</b>
<b>Inland Fisheries—</b>				
Steam vessels or tugs.....	145	898,365	142	993,357
Boats (sail and row).....	2,675	171,212	2,280	148,968
Boats (gasoline).....	995	484,107	1,012	529,621
Gill nets.....	-	1,119,721	-	1,246,746
Seines.....	542	35,362	426	34,305
Pound nets.....	1,205	780,245	1,108	777,107
Hoop nets.....	2,582	70,018	2,282	95,037
Lines.....	1,024	6,292	1,016	7,282
Weirs.....	396	47,080	321	41,058
Piers and wharves.....	316	146,350	341	127,818
Freezers and ice-houses.....	715	402,624	600	359,905
Small fish and smoke houses.....	139	24,615	93	23,170
Eel traps.....	10	30	175	525
Fish wheels.....	2	250	4	850
Spears.....	199	669	122	410
<b>Total value.....</b>	<b>-</b>	<b>4,186,940</b>	<b>-</b>	<b>4,386,159</b>



### 73.—Number and Capital Value of Fishing Vessels, Boats, Nets, Traps, etc., used in the Fisheries of Canada, 1919 and 1920—concluded.

Description.	1919.		1920.	
	No.	\$	No.	\$
<b>Fish Canning and Curing Establishments.</b>				
Lobster canneries.....	520	2,031,409	578	2,426,920
Salmon canneries.....	76	13,961,100	67	10,072,356
Whale oil and fish oil factories.....	10	1,475,121	11	1,558,147
Sardine and other fish canneries.....	1	1,131,228	8	750,204
Clam canneries.....	13		9	90,449
Fish curing establishments.....	308	4,602,016	267	5,614,189
<b>Total of Fish Canning and Curing Establishments.....</b>	<b>925</b>	<b>23,200,874</b>	<b>940</b>	<b>20,512,265</b>
<b>Grand Total Capital Invested in Fisheries.....</b>	<b>—</b>	<b>54,694,026</b>	<b>—</b>	<b>50,405,478</b>

### 74.—Number of Persons Employed in the Fisheries of Canada, 1919 and 1920.

Men employed in	Sea Fisheries.		Inland Fisheries.	
	1919.	1920.	1919.	1920.
	No.	No.	No.	No.
Steam trawlers.....	200	206	—	—
Vessels.....	7,821	6,858	887	854
Boats.....	49,994	41,992	5,416	4,888
Carrying smacks.....	870	533	—	—
Fishing not in boats.....	—	—	2,616	1,861
<b>Total.....</b>	<b>58,885</b>	<b>49,594</b>	<b>8,919</b>	<b>7,603</b>

Employees in	In Fish Canning and Curing Establishments.					
	1919.			1920.		
	Male.	Female.	Total.	Male.	Female.	Total.
Lobster canneries.....	3,730	3,516	7,246	4,280	4,001	8,281
Sardine and other fish canneries.....	339	384	723	431	324	755
Clam canneries.....				57	105	162
Salmon canneries.....	4,582	2,415	6,997	4,266	2,056	6,322
Whale oil and fish oil factories.....	377	8	385	229	7	236
Fish curing establishments.....	2,527	478	3,005	2,452	291	2,743
<b>Total.....</b>	<b>11,555</b>	<b>6,801</b>	<b>18,356</b>	<b>11,715</b>	<b>6,784</b>	<b>18,499</b>
<b>Grand Total.....</b>	<b>79,359</b>	<b>6,801</b>	<b>86,160</b>	<b>68,912</b>	<b>6,784</b>	<b>75,696</b>

### 75.—Government Bounties to Fishermen in the fiscal years 1917 to 1920.

Province.	Number of men who received bounties.				Values of bounties paid.			
	1917.	1918.	1919.	1920.	1917.	1918.	1919.	1920.
	No.	No.	No.	No.	\$	\$	\$	\$
Prince Edward Island.....	2,397	2,333	1,805	1,187	10,756	10,392	8,702	8,110
Nova Scotia.....	14,254	14,141	13,538	11,289	86,115	85,001	85,521	93,873
New Brunswick.....	2,498	2,492	2,240	1,544	17,538	17,114	16,085	13,774
Quebec.....	10,360	10,875	9,667	5,560	45,484	47,168	44,828	36,762
<b>Total.....</b>	<b>29,509</b>	<b>29,841</b>	<b>27,250</b>	<b>19,580</b>	<b>159,893</b>	<b>159,675</b>	<b>155,136</b>	<b>152,519</b>

**76.—Quantities and Values of Sea Fish Marketed in Canada during the Calendar Years 1919 and 1920.**

Kinds of Fish.	1919.		1920.	
	Quantity.	Value.	Quantity.	Value.
Cod, used fresh..... cwt.	166,530	\$ 862,746	118,755	\$ 702,667
“ green salted..... “	278,091	1,711,431	167,840	932,173
“ smoked fillets..... “	13,145	179,229	38,055	436,778
“ smoked..... “	3,374	55,048	278	3,810
“ dried..... “	605,135	6,811,315	444,776	3,809,470
“ canned..... cases	1,690	13,520	3,481	29,348
“ boneless..... cwt.	29,009	353,548	25,547	344,215
“ roe..... “	—	—	40	400
“ liver oil, medicinal..... gal.	—	—	11,049	11,310
Haddock, used fresh..... cwt.	130,211	537,889	107,500	455,647
“ canned..... cases	34,055	298,449	17,020	129,654
“ smoked..... cwt.	39,849	375,905	67,750	623,214
“ green-salted..... “	65,444	303,233	25,443	74,440
“ dried..... “	66,673	531,185	38,835	237,945
“ boneless..... “	139	2,085	136	1,780
Hake and cusk, used fresh..... “	21,508	68,933	3,589	10,357
“ “ green-salted..... “	69,401	302,172	40,705	114,679
“ “ smoked fillets..... “	13,503	49,188	2,606	33,385
“ “ smoked..... “	—	—	150	1,200
“ “ dried..... “	22,511	195,108	27,370	199,015
“ “ boneless..... “	2,631	30,169	347	2,810
Pollock, used fresh..... “	16,494	55,808	11,960	26,821
“ green-salted..... “	44,689	207,520	17,215	54,727
“ smoked fillets..... “	15	97	2,630	34,055
“ dried..... “	40,726	336,775	29,131	179,499
“ boneless..... “	65	784	—	—
“ canned..... cases	160	1,280	—	—
Whiting..... cwt.	53	284	36	274
Tongues and sounds pickled or dried..... “	1,073	10,469	1,144	10,025
Halibut, used fresh..... “	240,728	5,114,416	262,434	4,533,650
“ smoked..... “	505	5,306	77	1,128
“ salted..... “	15	120	—	—
“ canned..... cases	—	—	41	410
Flounders, brill, plaice, etc..... cwt.	28,815	142,547	14,695	70,834
Skate..... “	2,928	8,620	1,448	5,278
Soles..... “	14,377	91,407	2,374	20,012
Herring, used fresh..... “	63,765	189,323	94,771	206,656
“ boneless..... “	2,230	39,651	611	6,670
“ canned..... cases	73,639	399,963	33,769	200,368
“ smoked..... cwt.	95,912	536,704	148,304	500,132
“ dry-salted..... “	262,225	504,972	512,168	872,107
“ pickled..... brl.	60,701	517,348	47,028	308,725
“ used as bait..... “	231,286	418,136	182,675	361,349
“ used as fertilizer..... “	24,120	24,912	73,729	86,187
Mackerel, used fresh..... cwt.	106,867	987,146	61,444	631,144
“ canned..... cases	1,743	12,504	1,869	12,535
“ salted..... brl.	42,897	1,036,199	26,144	483,024
Sardines, canned..... cases	119,225	593,811	129,925	627,972
“ sold fresh and salted..... brl.	187,237	236,263	164,101	232,296
Pilchards, used fresh..... cwt.	76	406	553	1,212
“ canned..... cases	63,065	370,841	91,929	503,937
“ salted..... brl.	78	624	1,154	6,925
“ used as bait..... “	—	—	9,937	28,191
Alewives, used fresh..... cwt.	12,681	33,960	12,057	30,870
“ salted..... brl.	17,749	170,060	17,143	155,809
“ smoked..... cwt.	2,069	19,418	1,499	20,198

**76.—Quantities and Values of Sea Fish Marketed in Canada during the Calendar years 1919 and 1920—concluded.**

Kinds of Fish.	1919.		1920.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Bass..... cwt.	823	13,450	779	6,857
Perch..... "	2,243	19,808	2,021	16,437
Salmon, used fresh..... "	460,413	3,824,158	216,865	2,750,351
" canned..... cases	1,394,215	13,842,140	1,188,599	12,419,034
" smoked..... cwt.	7,167	62,475	2,667	23,131
" dry-salted..... "	8,235	34,720	33,645	151,129
" mild cured..... "	5,882	95,559	8,924	205,734
" pickled..... "	842	8,468	526	5,011
" roe..... "	512	5,120	-	-
Shad, used fresh..... "	917	9,046	408	5,961
" salted..... brl.	44	685	-	-
Smelts..... cwt.	75,653	834,835	58,056	788,617
Sturgeon, used fresh..... "	277	6,034	338	5,470
Trout, fresh..... "	1,315	18,613	884	15,771
Black cod, used fresh..... cwt.	7,792	67,249	11,369	70,110
" green-salted..... "	-	-	42	409
" smoked..... "	3,573	49,331	7,164	110,683
Red cod, etc., used fresh..... "	5,952	37,368	3,816	19,574
" smoked..... "	205	2,045	38	442
Albacore, used fresh..... "	7,396	41,485	1,542	10,587
" canned..... cases	100	900	-	-
Caplin..... brl.	24,195	82,930	7,865	17,090
Eels..... cwt.	2,768	23,473	2,256	22,037
Greyfish, canned..... cases	9	45	-	-
Octopus..... cwt.	484	6,760	394	4,082
Oulachons..... "	139	2,405	2,115	9,096
Squid..... brl.	11,023	31,028	4,950	12,280
Swordfish..... cwt.	6,013	97,945	3,351	51,104
Tom cod..... "	11,542	34,790	8,247	31,015
Mixed fish..... "	1,722	2,845	1,591	2,116
Shellfish:—				
Clams and quahaugs..... brl.	22,745	74,381	8,986	33,383
" " canned..... cases	14,599	85,744	17,195	114,026
Cockles..... cwt.	28	70	214	657
Crabs..... "	6,446	55,102	10,660	58,263
Lobsters in shell..... "	85,340	1,224,882	69,000	1,434,638
" canned..... cases	128,759	4,095,934	163,299	5,687,484
" Tomalley..... "	1,305	17,527	2,619	30,333
Mussels..... cwt.	281	281	172	121
Oysters..... brl.	14,565	153,276	14,526	146,863
Scallops, shelled..... "	25,319	75,463	8,131	28,848
" canned..... cases	129	1,548	-	-
Shrimps..... cwt.	767	17,528	563	13,536
Winkles..... "	2,094	5,552	1,915	2,919
Sealskins, fur..... No.	70	1,294	1,058	24,712
" hair..... "	6,159	18,618	4,891	14,699
Porpoise skins..... "	184	3,680	186	2,790
Whalebone and meal..... ton	344	10,320	503	15,090
Whale fertilizer..... "	1,200	108,000	1,033	82,630
Porpoise oil..... gal.	7,360	7,360	3,720	3,720
Seal oil..... "	18,754	18,110	12,598	12,598
Whale oil..... "	609,969	530,548	604,070	338,026
Fish oil..... "	475,047	422,372	342,686	279,855
Fish glue..... "	360	1,250	-	-
Fish offal..... ton	8,944	8,722	2,076	7,515
Fish bones..... cwt.	2,523	4,628	9,100	3,579
Fish skins..... "	5,129	10,862	6,260	16,069
Fertilizer..... ton	4,597	32,831	580	38,230
<b>Totals..... \$</b>	<b>-</b>	<b>50,990,815</b>	<b>-</b>	<b>43,602,959</b>

**77.—Quantities and Values of Inland Fish Marketed in Canada during the Calendar Years 1919 and 1920.**

Kinds of Fish.		1919.		1920.	
		Quantity.	Value.	Quantity.	Value.
Alewives, fresh.....	cwt.	555	\$ 2,775	142	\$ 426
" salted.....	brl.	475	4,987	230	2,300
Bass.....	cwt.	27	410	360	5,666
Carp.....	"	12,397	54,236	11,900	52,637
Catfish.....	"	6,360	52,568	6,263	46,813
Caviar.....	lb.	7,084	7,084	—	—
Eels.....	cwt.	9,562	114,505	7,885	84,675
Goldeyes, fresh.....	"	527	2,388	2,123	10,685
" smoked.....	"	919	15,618	1,245	22,829
Herring, fresh.....	"	109,811	678,846	126,673	758,178
" salted.....	brl.	5,727	37,225	6,321	37,926
Maskinonge.....	cwt.	4	65	4	78
Mixed fish.....	"	39,435	183,057	36,261	160,298
Mullets, fresh.....	"	26,833	59,884	24,183	62,116
Perch.....	"	16,483	165,449	18,955	190,248
Pickarel.....	"	61,727	582,744	61,883	631,483
Pickarel (blue).....	"	23,917	167,419	33,795	236,565
Pike, fresh.....	"	58,163	327,675	43,691	264,896
Porpoise.....	no.	104	6,240	74	4,440
Salmon.....	cwt.	826	17,273	2,706	41,580
Shad.....	"	1,026	15,104	1,048	12,704
Smelts.....	"	30	360	62	744
Sturgeon.....	"	3,813	58,657	3,035	50,901
" bladders.....	no.	4	2	438	219
" caviar.....	lb.	—	—	6,050	6,393
Trout, fresh.....	cwt.	63,836	813,868	51,489	663,482
" salted.....	brl.	2,345	30,485	2,260	29,380
Tullibee, fresh.....	cwt.	49,457	268,999	38,514	245,644
" smoked.....	"	—	—	37	675
Whitefish, fresh.....	cwt.	196,953	1,845,854	176,516	1,969,812
" salted.....	brl.	299	3,887	3,499	45,487
<b>Total.....</b>	<b>\$</b>	<b>—</b>	<b>5,517,664</b>	<b>—</b>	<b>5,639,280</b>

**78.—Yield of the Fisheries of Canada, compared as to Quantity and Value, for 1919 and 1920. ("000" omitted).**

Kinds of Fish.	Actual value, 1920.	Value at prices of 1919.	Actual value, 1919.	Increase (+) or decrease (—).	Due to higher (+) or lower prices (—).	Due to larger (+) or smaller (—) quantities.
	\$	\$	\$	\$	\$	\$
Salmon.....	15,596	13,618	17,890	— 2,294	+ 1,978	— 4,272
Lobsters.....	7,152	6,175	5,338	+ 1,814	+ 977	+ 837
Cod.....	6,270	7,596	9,987	— 3,717	— 1,326	— 2,391
Halibut.....	4,535	5,525	5,120	— 585	— 990	+ 405
Herring.....	3,428	4,407	3,347	+ 81	+ 979	+ 1,060
Whitefish.....	2,015	1,703	1,850	+ 165	+ 312	— 147
Haddock.....	1,523	1,603	2,049	— 526	— 80	— 446
Mackerel.....	1,127	1,260	2,036	— 909	— 133	— 776
Pickarel.....	868	838	750	+ 118	+ 30	+ 88
Sardines.....	860	761	830	+ 30	+ 99	— 69
Smelts.....	789	645	835	— 46	+ 144	— 190
Trout.....	709	709	863	— 154	—	— 154
Pilchards.....	540	499	372	+ 168	+ 41	+ 127
Hake and cusk.....	361	463	645	— 284	— 102	— 182
Pollock.....	295	373	602	— 307	— 78	— 229
Pike.....	265	246	328	— 63	+ 19	— 82
Tullibee.....	246	210	269	— 23	+ 36	— 59
Alewives.....	210	214	231	— 21	—	— 17
Perch.....	206	209	185	+ 21	+ 3	+ 24
Black cod.....	181	285	116	+ 65	+ 104	+ 169
Clams and quahaugs.....	147	115	160	— 13	+ 32	— 45
Oysters.....	147	153	153	— 6	—	—
Oil, fish.....	280	309	422	— 142	— 29	— 113
Oil, whale.....	338	525	530	— 192	— 187	— 5
Whale fertilizer.....	83	93	108	— 25	— 10	— 15
Other articles of the fisheries.....	1,070	1,078	1,492	— 422	— 8	— 414
<b>Total.....</b>	<b>49,241</b>	<b>49,612</b>	<b>55,508</b>	<b>— 7,267</b>	<b>— 371</b>	<b>— 6,896</b>



**79.—Quantity<sup>1</sup> and Value<sup>2</sup> of Chief Commercial Fishes, fiscal year 1916-17 and Calendar Years 1917 to 1920.**

Kind of Fish.	1916.	1917.	1918.	1919.	1920.	Increase or decrease, 1920 compared with 1919 inc. +, dec. -.
Salmon.....cwt.	1,239,668	1,642,770	1,531,773	1,688,653	1,284,729	- 403,924
\$	10,882,431	17,411,029	17,869,517	17,889,913	15,595,970	- 2,293,943
Lobsters.....cwt.	480,898	474,871	264,096	345,806	399,985	+ 54,179
\$	5,508,054	5,654,265	3,531,104	5,338,343	7,152,455	+ 1,814,112
Cod.....cwt.	2,026,231	2,302,987	2,206,666	2,606,770	1,982,706	- 624,064
\$	5,449,964	8,281,920	10,083,562	9,987,612	6,270,171	- 3,717,441
Halibut.....cwt.	142,823	140,024	207,139	243,449	262,726	+ 19,277
\$	2,263,873	2,066,635	5,490,226	5,119,842	4,535,188	- 584,654
Herring.....cwt.	1,751,314	1,481,708	1,973,669	1,573,986	2,072,723	+ 498,737
\$	3,050,421	3,693,688	4,719,561	3,347,080	3,428,298	+ 81,218
Whitefish.....cwt.	164,992	178,838	205,044	197,403	181,764	- 15,639
\$	1,135,486	1,248,006	1,927,863	1,849,741	2,015,299	+ 165,558
Haddock.....cwt.	582,028	712,416	554,366	564,574	441,745	- 122,829
\$	1,711,271	2,936,719	2,796,171	2,048,746	1,522,680	- 526,066
Mackerel.....cwt.	156,075	167,067	196,781	229,877	142,347	- 87,530
\$	924,746	1,333,354	1,937,211	2,035,849	1,126,703	- 909,146
Pickarel (including blue pickarel)cwt.	105,428	86,425	70,088	85,644	95,678	+ 10,034
\$	871,719	650,632	649,180	750,163	868,048	+ 117,885
Sardines.....bbl.	315,832	274,359	295,770	214,525	196,649	- 17,876
\$	1,481,261	1,910,705	2,320,513	830,074	860,268	+ 30,194
Smelts.....cwt.	68,629	73,153	87,555	75,271	58,118	- 17,153
\$	847,357	1,027,555	971,206	835,195	789,361	- 45,834
Trout.....cwt.	88,071	75,662	86,608	68,670	55,763	- 12,907
\$	741,610	699,950	808,770	862,966	708,633	- 154,333
Pilchards.....cwt.	-	1,363	72,723	65,624	88,050	+ 22,426
\$	-	11,810	413,853	371,871	540,265	+ 168,394
Hake and cusk.....cwt.	385,953	321,605	245,051	244,749	175,719	- 69,030
\$	757,456	890,265	844,565	645,570	361,446	- 284,124
Pollock.....cwt.	143,306	189,908	164,502	227,963	141,302	- 86,661
\$	268,756	486,195	574,832	602,264	295,102	- 307,162
Pike.....cwt.	73,993	79,383	60,100	58,163	43,691	- 14,472
\$	404,453	429,396	403,514	327,675	264,896	- 62,779
Tullibee.....cwt.	58,537	64,910	74,411	49,457	38,588	- 10,869
\$	301,060	333,686	321,022	268,999	246,319	- 22,680
Alewives.....cwt.	80,020	98,277	78,616	70,577	65,384	- 5,193
\$	117,083	196,482	237,994	231,200	209,603	- 21,597
Perch.....cwt.	22,773	24,707	27,886	18,547	20,976	+ 2,429
\$	114,656	126,723	150,608	185,257	206,685	+ 21,428
Black cod.....cwt.	s	s	29,966	10,527	25,783	+ 15,256
\$	-	-	285,034	116,580	181,202	+ 64,622
Clams and quahaugs.....bbl.	54,942	55,655	40,554	36,446	26,143	- 10,303
\$	195,805	222,965	169,799	160,125	147,409	- 12,716
Oysters.....bbl.	18,361	13,632	13,916	14,565	14,526	- 39
\$	147,751	109,265	123,570	153,276	146,863	- 6,413

<sup>1</sup>Caught and landed.    <sup>2</sup>Marketed.    <sup>3</sup>Included with cod.

**80.—Total Value of Fisheries by Provinces in the fiscal year 1916-1917 and Calendar Years 1917-1920.**

Province.	Fiscal Year.	Calendar Years.			
	1917.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Prince Edward Island.....	1,344,179	1,786,310	1,148,201	1,536,844	1,708,723
Nova Scotia.....	10,092,902	14,468,319	15,143,066	15,171,929	12,742,659
New Brunswick.....	5,656,859	6,143,088	6,298,990	4,979,574	4,423,745
Quebec.....	2,991,624	3,414,378	4,568,773	4,258,731	2,592,382
Ontario.....	2,658,993	2,866,419	3,175,111	3,410,750	3,336,412
Manitoba.....	1,390,002	1,543,288	1,830,435	1,031,117	1,249,607
Saskatchewan.....	231,946	320,238	447,012	475,797	296,472
Alberta.....	144,317	184,009	318,913	333,330	529,078
British Columbia.....	14,637,346	21,518,595	27,282,223	25,301,607	22,329,161
Yukon.....	60,210	67,400	37,820	8,800	33,100
<b>Total for Canada.....</b>	<b>39,208,378</b>	<b>52,312,044</b>	<b>60,250,544</b>	<b>53,508,479</b>	<b>49,241,339</b>

**81.—Total Value of the Fisheries of Canada in the fiscal years 1870-1921.**

Year.	Value.	Year.	Value.	Year.	Value.	Year.	Value.
	\$		\$		\$		\$
1870.....	6,577,391	1883.....	16,958,192	1896.....	20,407,425	1909-10.....	29,629,167
1871.....	7,573,199	1884.....	17,766,404	1897.....	22,783,546	1910-11.....	29,965,433
1872.....	9,570,116	1885.....	17,722,973	1898.....	19,667,121	1911-12.....	34,667,872
1873.....	10,754,997	1886.....	18,679,288	1899.....	21,891,706	1912-13.....	33,389,464
1874.....	11,681,886	1887.....	18,336,103	1900.....	21,557,639	1913-14.....	33,207,748
1875.....	10,350,385	1888.....	17,418,510	1901.....	25,737,153	1914-15.....	31,264,631
1876.....	11,117,000	1889.....	17,665,256	1902.....	21,959,433	1915-16.....	35,860,708
1877.....	12,005,934	1890.....	17,714,902	1903.....	23,101,878	1916-17.....	39,208,378
1878.....	13,215,678	1891.....	18,977,878	1904.....	23,516,439	1917.....	52,312,044
1879.....	13,529,254	1892.....	18,941,171	1905.....	29,479,562	1918.....	60,250,544
1880.....	14,499,979	1893.....	20,686,661	1906.....	26,279,485	1919.....	56,508,479
1881.....	15,817,162	1894.....	20,719,573	1907-08.....	25,499,349	1920.....	49,241,339
1882.....	16,824,092	1895.....	20,199,338	1908-09.....	25,451,085	1921.....	34,930,935

<sup>1</sup>Calendar year.

**82.—Value of Exports and Imports of Fish and Fish Products, 1902-1921.**

Year.	Exports, fisheries, domestic.	Imports of fish for home consumption.		Year.	Exports, fisheries, domestic.	Imports of fish for home consumption.	
		Dutiable.	Free.			Dutiable.	Free.
	\$	\$	\$		\$	\$	\$
1902.....	14,143,294	591,064	451,835	1912.....	16,704,678	1,203,045	984,458
1903.....	11,800,184	629,545	633,680	1913.....	16,336,721	1,519,571	910,923
1904.....	10,759,029	704,577	685,936	1914.....	20,623,560	1,469,305	635,231
1905.....	11,114,318	713,264	630,660	1915.....	19,687,068	1,080,225	568,880
1906.....	16,025,840	756,410	1,152,253	1916.....	22,377,977	804,398	537,342
1907 <sup>1</sup> .....	10,362,142	699,218	862,880	1917.....	24,889,253	1,259,799	818,613
1908.....	13,867,367	795,612	1,026,996	1918.....	32,602,151	966,643	1,397,127
1909.....	13,319,664	746,315	814,770	1919.....	37,137,072	1,054,848	2,079,530
1910.....	15,663,162	909,036	715,703	1920.....	42,285,035	2,605,379	1,334,718
1911.....	15,675,544	1,123,581	669,033	1921.....	33,662,751	2,416,152	1,809,960

<sup>1</sup>Nine months.

**83.—Exports of the Fisheries, the Produce of Canada, by principal countries, in the fiscal years 1920 and 1921.**

Exports to—	1920.	1921.	Exports to—	1920.	1921.
	\$	\$		\$	\$
United Kingdom.....	9,890,805	7,703,385	Bermuda.....	70,016	50,503
Australia.....	538,566	452,664	Straits Settlements.....	304,842	235,509
British W. Indies.....	1,622,398	1,490,008	Fiji Islands.....	71,993	95,595
British Guiana.....	349,843	335,023	Egypt and Sudan.....	3,566	8,345
New Zealand.....	444,009	246,228	Other British Possessions.....	127,934	140,143
Newfoundland.....	90,845	52,809			
Hong Kong.....	91,760	444,469	<b>Total British Empire...</b>	<b>13,606,577</b>	<b>11,254,681</b>

### 83.—Exports of the Fisheries, Produce of Canada, by principal countries, in the fiscal years 1920 and 1921—concluded.

Exports to—	1920.	1921.	Exports to—	1920.	1921.
	\$	\$		\$	\$
Foreign Countries.					
United States.....	18,568,264	15,779,473	Argentine.....	71,896	68,862
Brazil.....	1,522,939	1,216,243	Panama.....	57,354	45,585
Cuba.....	2,387,528	1,459,988	Norway.....	39,681	60,801
Dutch Guiana.....	98,131	55,308	Sweden.....	80,212	263,598
Dutch E. Indies.....	19,440	46,848	China.....	215,419	188,394
France.....	2,617,492	882,360	Miquelon and St. Pierre.	6,409	2,699
French W. Indies.....	33,457	34,146	Other foreign countries...	838,732	543,961
Italy.....	145,120	10,793			
Japan.....	504,333	527,561	<b>Total foreign countries</b>	<b>28,621,419</b>	<b>22,408,070</b>
Porto Rico.....	1,301,354	1,169,618			
Chile.....	170,997	51,832	<b>Grand total of exports.</b>	<b>42,285,035</b>	<b>33,662,751</b>

### 84.—Exports of the Fisheries, compared as to Quantity and Value, for 1920 and 1921 ('000' omitted).

Kinds of Fish.	Actual value, 1921.	Value at prices of 1920.	Actual value, 1920.	Increase (+) or decrease (-).	Due to higher (+) or lower (-) prices.	Due to larger (+) or smaller (-) quantities.
	\$	\$	\$	\$	\$	\$
Alewives, salted.....	127	151	154	- 27	- 24	3
Bait fish.....	51	58	24	+ 27	+ 7	34
Codfish, boneless, canned or preserved..	225	207	199	+ 26	+ 8	8
Codfish, dry salted.....	5,220	6,014	8,002	- 2,782	- 794	1,988
Codfish, fresh and frozen.....	117	118	163	- 46	- 1	45
Codfish, wet salted and pickled.....	766	795	1,243	- 477	- 29	448
Clams, fresh and canned.....	67	38	36	+ 31	+ 29	2
Eels.....	84	80	86	- 2	+ 4	6
Haddock, canned.....	36	30	166	- 130	+ 6	136
Haddock, dried.....	295	237	549	- 254	+ 58	312
Haddock, fresh and frozen.....	75	137	145	- 70	- 62	8
Haddock, smoked.....	152	141	138	+ 14	+ 11	3
Halibut, fresh and frozen.....	913	814	476	+ 437	+ 99	338
Herring, lake, fresh and frozen.....	810	734	661	+ 149	+ 76	73
Herring, lake, pickled.....	14	18	98	- 84	- 4	80
Herring, sea, canned.....	274	272	471	- 197	+ 2	199
Herring, sea, dry salted.....	991	971	775	+ 216	+ 20	196
Herring, sea, fresh and frozen.....	248	172	153	+ 95	+ 76	19
Herring, sea, pickled.....	482	507	730	- 248	- 25	223
Herring, sea, smoked.....	387	454	513	- 126	- 67	59
Lobsters, canned.....	5,180	4,579	4,084	+ 1,096	+ 601	495
Lobsters, fresh.....	1,033	1,046	843	+ 185	+ 13	198
Mackerel, fresh and frozen.....	574	445	484	+ 90	+ 129	39
Mackerel, pickled.....	564	634	948	- 384	- 70	314
Pilchards, canned.....	269	289	339	- 70	- 20	50
Pollock, hake and cusk, fresh and frozen	11	19	50	- 39	- 8	31
Pollock, hake and cusk, dried.....	534	604	627	- 93	- 70	23
Pollock, hake and cusk, green salted.....	68	91	212	- 144	- 23	121
Salmon, canned.....	7,581	6,032	12,067	- 4,486	+ 1,549	6,035
Salmon, dry salted (chum).....	131	147	71	+ 60	+ 16	76
Salmon, fresh and frozen.....	744	396	1,420	- 676	+ 348	1,024
Salmon, pickled.....	207	183	208	- 1	+ 24	25
Salmon or lake trout.....	364	310	299	+ 65	+ 54	11
Sea fish, other, fresh.....	31	87	35	- 4	+ 56	52
Sea fish, other, preserved.....	10	10	34	- 24	-	24
Smelts.....	774	738	764	+ 10	+ 36	26
Swordfish.....	38	43	71	- 33	- 5	28
Tullibee.....	325	397	313	+ 12	+ 72	84
Whitefish.....	1,330	1,117	1,060	+ 270	+ 213	57
Fish, other, fresh and frozen.....	1,916	1,802	1,848	- 68	+ 114	46
Tongues and sounds.....	18	9	8	+ 10	+ 9	1
Oil, fish, cod.....	87	99	384	- 297	- 12	285
Oil, fish, other.....	65	76	124	- 59	- 11	48
Oil, seal.....	2	3	49	- 47	- 1	46
Oil, whale.....	95	96	682	- 587	- 1	586
Other articles of the fisheries.....	371	347	474	- 103	+ 24	127
<b>Totals.....</b>	<b>33,636</b>	<b>31,547</b>	<b>42,285</b>	<b>- 8,629</b>	<b>+ 2,109</b>	<b>- 10,738</b>
Increase or decrease per cent.....	-	-	-	- 20.4	+ 6.7	- 25.4

## MINING.

From the point of view of minerals, and the development of mining, Canada may be divided into four great areas, (1) the Maritime Provinces, (2) Ontario and Quebec, (3) the Prairie Provinces, (4) British Columbia.

In the Maritime Provinces the first discoveries of minerals were made by Master Simon, a French mining engineer who, while accompanying the de Monts expedition in 1604, discovered iron and silver in St. Mary's Bay, native copper at cape d'Or, amethysts on the eastern shore of the Bay of Fundy and copper ore at port Mouton. In 1672 Denys mentions the existence of coal in his concession on Cape Breton Island, and in 1677 he was given the right to exact a duty of 20 sous per ton on coal. The deposits of coal in Cape Breton were used during the next century by the French at Louisbourg and the English at Halifax, while the Pictou county deposits were discovered in 1798. In 1827 the mines came into the possession of the General Mining Association, which enjoyed a monopoly of Nova Scotia coal mining until 1858, introducing the best English coal mining methods into Canada. From 1854 to 1866—the years of the Reciprocity Treaty—there was a large exportation to the United States, which afterwards was diverted to the St. Lawrence ports. In 1893, 834,019 tons were mined and in 1920, 6,395,545. There is coal mining in New Brunswick, especially in the Grand Lake district, but the production is relatively unimportant. Iron, which was first extracted in Nova Scotia at Nictaux and Torbrook in 1825, was afterwards found in Colchester County in 1849 and also in Pictou County, where coal is found along with it. The last important mineral of the Maritime Provinces is gypsum, which has been mined since the end of the 18th century in the Nova Scotian fields at Windsor, Chéticamp, Nappan and St. Anne's bay and in the New Brunswick field at Hillsboro. At first, mining was carried on principally in the winter, when the farmers hauled the mineral to the ports for shipment to the New England States. Control of the industry remained in the United States, whither the gypsum is shipped to be refined.

The same rock formation, which in Ontario yields the gold of Porcupine, the silver of Cobalt, and the nickel of Sudbury, passes into northern Quebec, but here the undeveloped state of the country leaves its wealth conjectural. Deposits of bog iron were discovered near Three Rivers in 1667 and opened in 1733, since when they have been worked, although with a lessening production, up to the present time. In Ontario, iron was found in Leeds County in 1800, at Nordmendale in 1813, and in Michipicoten in 1899. 1843 marks a stage in the history of mining in Ontario, for in that year Sir William Logan made his report on the geology of Ontario, the effect of which was shown in a greatly increased application for prospectors' privileges. Copper was found in 1847 at the Bruce Mines and in 1882 at Sudbury. Although at first copper was thought the chief wealth of the Sudbury mines, as witness the name of the first company—Canada Copper



Company—nickel soon displaced it. Silver Isle was the first important silver discovery in Ontario, producing, between 1868 and 1884, silver to the value of \$3,250,000. Silver in Cobalt district was disclosed in 1903 by the construction of the Timiskaming and Northern Ontario Railway. Production rose to 31,507,791 ounces for 1911 since when it has fallen to 11,214,317 ounces in 1919. Gold had been discovered at Madoc in 1866 in what proved to be a small pocket. In 1909 the gold of Porcupine was found and made available by a branch of the Timiskaming and Northern Ontario Railway. Production continues here, especially at the Hollinger mine, which is now the largest gold mine in the world. There are several lesser minerals, among them oil in Ontario, and gold in Quebec. Finally there is asbestos, the presence of which in the Eastern Townships has been known since 1847. No mining was undertaken, however, until 1877. From 1890 to 1895 was a period of experimentation during which a method was found of using the short fibred parts of the mineral. In 1896 there was a production of 10,892 tons, which has risen to 188,687 in 1920.

The Prairie Provinces have a very limited range of important minerals. Natural gas was discovered near Medicine Hat during the construction of the Canadian Pacific Railway. Likewise, in the C.P.R. construction days, coal was found in Alberta, and geological estimates now give the province 87 p.c. of the coal reserves of Canada. The early fields of any importance were at Canmore and Anthracite; subsequent discoveries have shown important deposits at Crowsnest, Bankhead and Drumheller. In Saskatchewan there are lignite fields at Woods mountains and Cypress hills and in Manitoba at Turtle mountain. The coal production of Saskatchewan and Alberta in 1901 was 346,649 tons; in 1906 Alberta alone produced 1,385,000 tons and in 1919, 5,022,412 tons.

The mining district of British Columbia and the Yukon is a continuation of the Cordilleran range which passes through South America, Mexico and the United States and everywhere encloses great mineral wealth. In 1835 coal was discovered in British Columbia, but was practically neglected until, in 1851, mines were opened at Nanaimo, which have been worked ever since. In the late fifties gold was discovered along the Thompson river and in 1858 the famous Fraser river rush took place. In 1861 Cariboo district was reached by the prospectors, and Williams and Lightning Creeks discovered. By 1873 the Cassiar district was opened and still pushing north, prospectors entered the Yukon before 1880. Placer mining in the rich Klondike district was begun in 1894. The peak year for the Yukon was 1900 with a gold production of \$22,000,000, but as the cruder methods became less effective, production dropped to \$10,500,000 in 1904 and \$1,875,039 in 1919. Lode mining had been practically neglected during the period of the gold rushes. The mine of galena on Kootenay lake, which had been discovered by David Douglas in 1825, had been taken up in 1864 by George Hearst of California, but was soon abandoned. The real development of lode mining followed the introduction of railways such as the British

Columbia Southern and the Columbia and Western into southern British Columbia in the late 90's. Lode mining is now principally carried on between the South Thompson and the United States boundary for silver-lead, zinc and copper, and on Vancouver Island and neighbouring mainland for coal and iron.

**Mineral Statistics.**—The results of the census of mineral production taken in 1911, were published in the Year Book of 1913 (pages 196-199). In the present edition the Canadian statistics given are limited to those of the Dominion Government and of the Departments of Mines of the Provincial Governments. To the statistics of production in this section have been added statements of the imports of Portland cement (Table 104), of the imports of anthracite and bituminous coal (Table 105) and of the exports of coal (Table 106). Also, in view of the coal situation existing in 1922, Tables 107 and 108 have been added, the former showing the annual consumption of coal in Canada since 1886 and the latter the statistics by provinces of the coal made available for consumption in Canada in 1920.

**Mineral Production Compared as to Quantity and Value.**—Table 87 gives the results of calculations intended to show for each mineral product the increase or decrease in total value for 1920, as compared with 1919, that is due (a) to difference in price and (b) to difference in quantity.

**85.—Quantities and Values of Minerals produced in Canada, Calendar Years 1920 and 1921.**

Product.	1920.		1921 <sup>1</sup> .	
	Quantity.	Value.	Quantity.	Value.
<b>Metallic.</b>				
Cobalt metallic, and contained in oxide	lb.	546,023		\$
Copper.....	"	81,600,691	251,986	755,956
Gold.....	fine oz.	765,007	47,620,820	5,953,555
Iron, pig, from Canadian ore.....	ton	75,869	926,329	19,148,920
Iron ore sold for export.....	"	8,885	56,564	1,873,682
Lead.....	lb.	35,953,717	788	2,462
Nickel.....	"	61,335,706	66,679,592	3,828,742
Osmium iridium.....	oz.		19,293,060	6,752,571
Palladium.....	crude oz.	913	57	9,690
Platinum.....	"	595	591	—
Rhodium.....	"	513	292	21,910
Silver.....	fine oz.	13,330,357	—	—
Zinc.....	lb.	39,863,912	13,490,747	8,452,493
			53,089,356	2,471,310
<b>Total.....</b>	<b>\$</b>	<b>—</b>	<b>—</b>	<b>49,271,291</b>
<b>Non-metallic.</b>				
Actinolite.....	ton	100		
Arsenic, white and in ore.....	"	2,459	78	975
Asbestos.....	"	178,617	1,491	233,763
Asbestic.....	"	20,956	92,761	4,906,230
Barytes.....	"	751		
Chromite.....	"	11,016	270	9,567
Coal.....	"	16,631,954	2,798	55,696
Corundum.....	"	196	15,057,495	72,451,656
Feldspar.....	"	37,873	403	55,965
Fluorspar.....	"	11,235	29,868	230,754
Graphite.....	"	2,190	5,519	136,267
Graphite, artificial.....	"	104	1,037	65,862
Grindstones.....	"	2,444	—	—
Gypsum.....	"	429,144	1,281	64,067
			1,893,991	1,730,502

<sup>1</sup>Subject to revision.

### 85.—Quantities and Values of Minerals produced in Canada, Calendar Years 1920 and 1921—concluded.

		1920.		1921. <sup>1</sup>	
Product.		Quantity.	Value.	Quantity.	Value.
<b>Non-metallic—concluded.</b>			\$		\$
Magnesite.....	ton	18,378	512,756	2,927	81,320
Magnesium sulphate.....	"	1,947	39,886	2,029	39,506
Manganese.....	"	649	11,029	68	3,400
Mica.....	"	2,203	376,022	702	70,063
Mineral water.....	gal.	—	24,582	—	21,569
Natural gas.....	M.cu.ft.	16,845,518	4,232,642	14,460,784	4,947,075
Oxides.....	ton	19,128	157,909	8,879	93,610
Peat.....	"	4,550	18,650	500	2,000
Petroleum.....	brl.	196,251	822,235	187,541	546,856
Phosphate.....	ton	—	—	30	450
Pyrites.....	"	174,744	719,110	32,173	106,865
Quartz.....	"	128,295	467,821	101,553	317,711
Salt.....	"	209,855	1,544,724	164,658	1,673,685
Sodium sulphate.....	"	811	19,496	624	18,850
Strontium.....	"	75	2,625	—	—
Talc.....	"	21,671	166,934	10,134	144,565
Tripolite.....	"	260	8,600	341	11,268
<b>Total.....</b>	<b>\$</b>	<b>—</b>	<b>108,027,947</b>	<b>—</b>	<b>88,020,097</b>
<b>Structural Materials and Clay Products.</b>					
Cement, Portland and Puzzolan.....	brl.	6,651,980	14,798,070	5,752,885	14,195,143
Clay products—					
Brick, common.....	No.	303,343,028	4,835,996	209,270,838	3,343,732
Brick, pressed.....	"	85,137,125	2,004,537	79,230,980	1,703,968
Brick, moulded and ornamental..	"	3,515,000	73,926	1,920,484	48,183
Firebrick.....	"	—	—	4,817,902	256,088
Fireclay.....	\$	—	—	2,931	29,851
Fireclay blocks and shapes.....	\$	—	474,113	—	91,685
Fireproofing.....	ton	49,091	591,418	—	452,296
Hollow building blocks.....	No.	—	302,261	3,511,585	174,756
Kaolin.....	ton	683	15,022	124	1,888
Pottery.....	\$	—	209,171	—	231,262
Sewerpipe.....	ton	58,887	1,549,090	—	1,666,584
Terra-cotta lumber.....	No.	—	46,743	—	168,008
Tile, drain.....	"	14,527,030	562,652	—	428,604
Lime, quick.....	bush.	9,427,334	3,818,553	5,965,381	2,345,469
Lime, hydrated.....	ton	—	—	31,979	436,728
Sand-lime brick.....	No.	45,459,000	724,918	43,457,036	662,744
Sand and gravel.....	ton	11,530,795	4,291,067	11,574,862	2,537,249
Slate.....	\$	—	14,200	—	22,325
Stone—					
Granite.....	\$	—	1,508,916	—	937,894
Limestone.....	\$	—	5,665,693	—	5,155,046
Marble.....	\$	—	240,593	—	172,720
Sandstone.....	\$	—	165,149	—	78,036
<b>Total Structural Materials and Clay Products.....</b>	<b>\$</b>	<b>—</b>	<b>41,892,088</b>	<b>—</b>	<b>35,139,260</b>
<b>All other Non-Metallic.....</b>	<b>\$</b>	<b>—</b>	<b>108,027,947</b>	<b>—</b>	<b>88,020,097</b>
<b>Total value Metallic.....</b>	<b>\$</b>	<b>—</b>	<b>77,939,630</b>	<b>—</b>	<b>49,271,291</b>
<b>Grand Total.....</b>	<b>\$</b>	<b>—</b>	<b>227,859,665</b>	<b>—</b>	<b>172,430,648</b>

<sup>1</sup>Subject to revision.

**86.—Increase or Decrease in Quantities and Values of Principal Mineral Products for the Calendar Year 1920 as compared with 1919.**

Principal Products.		Increase (+) or decrease (—) in quantity.		Increase (+) or decrease (—) in value.			
			p.c.	\$	p.c.		
Cobalt.....	lb.	+	15,652	2.95	+	39,130	2.95
Copper.....	"	+	6,547,110	8.72	+	215,952	1.53
Gold.....	oz.	—	1,757	0.23	—	36,325	0.23
Pig iron, from Canadian ore.....	ton	+	37,412	97.28	+	1,167,591	129.82
Lead.....	lb.	+	7,873,982	17.97	+	161,225	5.28
Nickel.....	"	+	16,790,823	37.69	+	6,716,329	37.69
Silver.....	oz.	—	2,690,300	16.78	—	4,352,144	24.45
Zinc.....	lb.	+	7,669,205	23.82	+	695,513	29.44
<b>Total metallic.....</b>			—	—	+	4,676,837	6.38
Asbestos.....	ton	+	41,852	30.60	+	3,825,147	35.06
Chromite.....	"	+	2,475	28.98	+	22,481	9.82
Coal.....	"	+	2,950,736	21.57	+	26,280,374	48.30
Gypsum.....	"	+	130,081	43.50	+	678,704	55.85
Graphite.....	"	+	830	61.02	+	65,396	65.25
Magnesite.....	"	+	7,105	63.03	—	184,291	56.11
Quartz.....	"	+	33,304	35.06	—	59,814	11.34
Natural gas.....	M.cu.ft.	—	3,092,251	15.51	—	56,605	1.36
Petroleum.....	brl.	—	44,215	18.39	+	85,911	11.67
Pyrites.....	ton	—	1,743	0.99	+	196,406	37.58
Salt.....	"	+	61,554	41.51	+	146,795	10.50
Cement.....	brl.	+	1,656,723	33.17	+	4,995,637	50.96
Clay products.....	\$	—	—	—	+	2,758,563	34.89
Lime.....	bush.	+	2,279,833	31.90	+	1,507,946	65.26
Sand and gravel.....	ton	+	1,166,314	11.25	+	1,610,607	60.09
Sand-lime brick.....	No.	+	11,905,000	35.48	+	240,064	49.51
Stone.....	\$	—	—	—	+	3,354,414	79.37
<b>Total non-metallic.....</b>			—	—	+	46,496,438	44.95
<b>Grand Total.....</b>			—	—	+	51,173,275	28.96

**87.—Mineral Production of Canada, compared as to Quantity and Value, for the Calendar Years 1919 and 1920 ("000" omitted).**

Products.	Actual value 1920.	Value at prices of 1919.	Actual value 1919.	Increase (+) or decrease (-).	Due to higher (+) or lower (-) prices.	Due to larger (+) or smaller (-) quan- tities.
Metallic.	\$	\$	\$	\$	\$	\$
Cobalt, metallic and contained in oxide..	1,365	1,365	1,326	+ 39	-	+ 39
Copper.....	14,244	15,252	14,028	+ 216	- 1,008	+ 1,224
Gold.....	15,814	15,814	15,850	- 36	-	+ 36
Iron, pig, from Canadian ore.....	2,067	1,774	899	+ 1,168	+ 293	+ 875
Iron sold for export.....	64	70	46	+ 18	+ 6	+ 24
Lead.....	3,214	2,504	3,053	+ 161	+ 710	+ 549
Nickel.....	24,534	24,534	17,818	+ 6,716	-	+ 6,716
Palladium.....	58	52	3	+ 55	+ 6	+ 49
Platinum.....	38	44	4	+ 34	+ 6	+ 40
Silver.....	13,450	14,812	17,802	- 4,352	- 1,362	+ 2,990
Zinc.....	3,058	2,925	2,362	+ 696	+ 133	+ 563
Other.....	34	33	72	- 38	+ 1	+ 39
Total metallic.....	77,940	79,179	73,263	+ 4,677	- 1,239	+ 5,916
Non-metallic.						
Arsenic, white and in ore.....	448	370	510	- 62	+ 78	- 140
Asbestos.....	14,734	14,248	10,909	+ 3,825	+ 486	+ 3,339
Asbestos.....	58	61	66	- 8	+ 3	+ 5
Chromite.....	251	295	229	+ 22	- 44	+ 66
Coal.....	80,693	66,150	54,413	+ 26,280	+ 14,543	+ 11,737
Feldspar.....	281	223	86	+ 195	+ 58	+ 137
Fluorspar.....	240	217	98	+ 142	+ 23	+ 119



87.—Mineral Production of Canada, compared as to Quantity and Value, for the Calendar Years 1919 and 1920 ("000" omitted)—concluded.

Products.	Actual value 1920.	Value at prices of 1919.	Actual value 1919.	Increase (+) or decrease (—).	Due to higher (+) or lower (—) prices.	Due to larger (+) or smaller (—) quantities.
	\$	\$	\$	\$	\$	\$
<b>Non-metallic—concluded.</b>						
Graphite.....	165	161	100	+ 65	+ 4	+ 61
Grindstones.....	88	73	60	+ 28	+ 15	+ 13
Gypsum.....	1,894	1,744	1,215	+ 679	+ 150	+ 529
Magnesite.....	512	535	328	+ 184	+ 23	+ 207
Magnesium sulphate.....	40	24	9	+ 31	+ 16	+ 15
Mica.....	376	219	274	+ 102	+ 157	+ 55
Mineral pigments—Barytes.....	23	13	8	+ 15	+ 10	+ 5
Oxides.....	158	183	113	+ 45	+ 25	+ 70
Natural gas.....	4,233	3,528	4,176	+ 57	+ 705	+ 648
Petroleum.....	822	601	736	+ 86	+ 221	+ 135
Pyrites.....	719	517	523	+ 196	+ 202	+ 6
Quartz.....	468	712	528	+ 60	+ 244	+ 184
Salt.....	1,545	1,978	1,398	+ 147	+ 433	+ 580
Talc.....	167	135	116	+ 51	+ 32	+ 19
Other articles.....	113	96	107	+ 6	+ 17	+ 11
<b>Total non-metallic.....</b>	<b>108,028</b>	<b>92,083</b>	<b>76,002</b>	<b>+32,026</b>	<b>+15,945</b>	<b>+ 16,081</b>
<b>Structural Materials and Clay Products.</b>						
Cement, Portland.....	14,798	13,053	9,802	+ 4,996	+ 1,745	+ 3,251
Brick, common.....	4,836	4,033	3,850	+ 986	+ 803	+ 183
Brick, pressed.....	2,004	1,492	1,304	+ 700	+ 512	+ 188
Brick, moulded and ornamental.....	74	98	10	+ 64	+ 24	+ 88
Fireproofing.....	581	409	345	+ 236	+ 172	+ 64
Sewer pipe.....	1,549	1,007	1,074	+ 475	+ 542	+ 67
Tile, drain.....	563	446	617	+ 54	+ 117	+ 171
Other clay products.....	1,047	816	706	+ 341	+ 231	+ 110
Lime.....	3,819	3,047	2,311	+ 1,508	+ 772	+ 736
Sand-lime brick.....	725	657	485	+ 240	+ 68	+ 172
Sand and gravel.....	4,291	2,982	2,680	+ 1,611	+ 1,309	+ 302
Other articles.....	7,605	6,219	4,237	+ 3,367	+ 1,386	+ 1,982
<b>Total Structural Materials and Clay Products.....</b>	<b>41,892</b>	<b>34,259</b>	<b>27,421</b>	<b>+14,471</b>	<b>+ 7,633</b>	<b>+ 6,838</b>
<b>Grand Totals.....</b>	<b>227,860</b>	<b>205,521</b>	<b>176,686</b>	<b>+51,174</b>	<b>+22,339</b>	<b>+ 28,835</b>

88.—Value of Mineral Production in Canada, 1886-1921.

Calendar Year.	Total value.	Value per capita.	Calendar Year.	Total value.	Value per capita.	Calendar Year.	Total value.	Value per capita.
	\$	\$ cts.		\$	\$ cts.		\$	\$ cts.
1886.....	10,221,255	2-23	1898.....	38,412,431	7-32	1910.....	106,823,623	15-44
1887.....	10,321,331	2-23	1899.....	49,234,005	9-27	1911.....	103,220,994	14-32
1888.....	12,518,894	2-67	1900.....	64,420,877	12-04	1912.....	135,048,296	18-32
1889.....	14,013,113	2-96	1901.....	65,797,911	12-16	1913.....	145,634,812	19-35
1890.....	16,763,353	3-50	1902.....	63,231,836	11-36	1914.....	128,863,075	16-75
1891.....	18,976,616	3-92	1903.....	61,740,513	10-83	1915.....	137,109,171	17-44
1892.....	16,623,415	3-39	1904.....	60,082,771	10-27	1916.....	177,201,534	22-05
1893.....	20,035,082	4-04	1905.....	69,078,999	11-49	1917.....	189,646,821	23-18
1894.....	19,931,158	3-98	1906.....	79,286,697	12-81	1918.....	211,301,897	25-36
1895.....	20,505,917	4-05	1907.....	86,865,202	13-75	1919.....	176,686,390	20-84
1896.....	22,474,256	4-38	1908.....	85,557,101	13-16	1920.....	227,859,665	26-40
1897.....	28,485,023	5-49	1909.....	91,831,441	13-70	1921.....	172,430,648	19-62

<sup>1</sup>Subject to revision.

**89.—Value of Minerals produced in Canada by Provinces in the Calendar Years 1919, 1920 and 1921.**

Province.	1919.		1920.		1921. <sup>1</sup>	
	Value.	Per cent. of total.	Value.	Per cent. of total.	Value.	Per cent. of total.
	\$	p.c.	\$	p.c.	\$	p.c.
Nova Scotia.....	23,445,215	13.27	34,130,017	14.98	32,569,352	18.89
New Brunswick.....	1,770,945	1.00	2,491,787	1.09	1,874,804	1.09
Quebec.....	21,267,947	12.04	28,886,214	12.68	14,679,087	8.51
Ontario.....	67,917,998	38.44	81,715,808	35.86	54,511,392	31.61
Manitoba.....	2,868,378	1.62	4,223,461	1.85	2,075,807	1.20
Saskatchewan.....	1,521,964	0.86	1,837,468	0.81	1,086,610	0.63
Alberta.....	21,087,582	11.94	33,586,456	14.74	28,927,968	16.78
British Columbia.....	34,865,427	19.73	39,411,728	17.30	34,776,894	20.17
Yukon Territory.....	1,940,934	1.10	1,576,726	0.69	1,928,734	1.12
<b>Total.....</b>	<b>176,686,390</b>	<b>100.00</b>	<b>227,859,665</b>	<b>100.00</b>	<b>172,430,648</b>	<b>100.00</b>

**90.—Quantity of Gold produced in Canada by Provinces during the Calendar Years 1901-1921.**

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon Territory.	Total.
	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.
1901.....	26,459	145	11,844	—	726	257,292	870,750	1,167,216
1902.....	30,348	391	11,118	—	484	288,383	701,437	1,032,161
1903.....	25,533	180	9,076	—	48	284,108	592,594	911,539
1904.....	10,362	140	1,935	—	24	275,975	507,938	796,374
1905.....	13,707	191	4,402	—	121	285,529	381,001	684,951
1906.....	12,223	165	3,022	—	39	269,886	270,900	556,415
1907.....	13,675	—	3,212	—	33	236,216	152,381	405,517
1908.....	11,842	—	3,212	—	50	286,858	174,150	476,112
1909.....	10,193	193	1,569	—	25	250,320	191,565	453,865
1910.....	7,928	124	3,089	—	89	261,386	221,091	493,707
1911.....	7,781	613	2,062	—	10	238,496	224,197	473,159
1912.....	4,385	642	86,523	—	73	251,815	268,447	611,885
1913.....	2,174	701	219,801	—	—	297,459	282,838	802,973
1914.....	2,904	1,299	268,264	—	48	252,730	247,940	773,178
1915.....	6,636	1,099	406,577	—	195	273,376	230,173	918,056
1916.....	4,562	1,034	492,481	—	82	219,633	212,700	930,492
1917.....	2,210	1,511	423,261	440	—	133,742	177,667	738,831
1918.....	1,176	1,939	411,976	1,926	27	180,163	102,474	699,681
1919.....	850	1,470	505,739	724	24	167,252	90,705	766,764
1920.....	690	955	564,995	781	—	124,808	72,778	765,007
1921 <sup>1</sup> .....	439	635	708,213	207	49	150,792	65,994	926,329

**91.—Value of Gold produced in Canada by Provinces during the Calendar Years 1901-1921.**

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon Territory.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$
1901.....	546,965	3,000	244,837	—	15,000	5,318,703	18,000,000	24,128,503
1902.....	627,357	8,073	229,828	—	10,000	5,961,409	14,500,000	21,336,667
1903.....	527,806	3,712	188,036	—	1,000	5,873,036	12,250,000	18,843,590
1904.....	214,209	2,900	40,000	—	500	5,704,908	10,500,000	16,462,517
1905.....	283,653	3,940	91,000	—	2,500	5,902,402	7,876,000	14,159,195
1906.....	252,676	3,412	66,193	—	800	5,579,039	5,600,000	11,502,120
1907.....	282,686	—	66,399	—	675	4,883,020	3,150,000	8,382,780
1908.....	244,799	—	66,389	—	1,037	5,929,880	3,600,000	9,842,105
1909.....	210,711	3,990	32,425	—	525	5,174,579	3,960,000	9,382,230
1910.....	163,891	2,565	63,849	—	1,850	5,403,318	4,570,362	10,205,835

<sup>1</sup>Subject to revision.

**91.—Value of Gold produced in Canada by Provinces during the Calendar Years 1901-1921—concluded.**

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon Territory.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$
1911.....	160,854	12,672	42,625	—	207	4,930,145	4,634,574	9,781,077
1912.....	90,638	13,270	1,788,596	—	1,509	5,205,485	5,549,296	12,648,794
1913.....	44,935	14,491	4,543,690	—	—	6,149,027	5,846,780	16,598,923
1914.....	60,031	26,708	5,545,509	—	992	5,224,393	5,125,374	15,983,007
1915.....	137,180	22,720	8,404,693	—	4,026	5,651,184	4,758,098	18,977,901
1916.....	94,305	21,375	10,180,485	—	1,695	4,540,216	4,396,900	19,234,976
1917.....	45,685	31,235	8,749,581	9,095	—	2,764,693	3,672,703	15,272,992
1918.....	24,310	40,083	8,516,299	139,638	558	3,624,476	2,118,325	14,463,689
1919.....	17,571	30,388	10,454,553	14,966	500	3,457,406	1,875,039	15,850,423
1920.....	14,263	19,174	11,679,483	16,145	—	2,580,010	1,504,455	15,814,098
1921 <sup>1</sup> .....	9,075	13,127	14,640,062	4,279	1,013	3,117,147	1,364,217	19,148,920

NOTE.—For the years 1862 to 1900, see Canada Year Book, 1916-17, pp. 268 and 269.

**92.—Quantity and Value of Silver produced in Canada during the Calendar Years 1887-1921.**

Year.	Oz.	Value.	Year.	Oz.	Value.	Year.	Oz.	Value.
		\$			\$			\$
1887.....	355,083	347,271	1898.....	4,452,333	2,593,929	1909.....	27,529,473	14,178,504
1888.....	437,232	410,998	1899.....	3,411,644	2,032,658	1910.....	32,869,264	17,580,455
1889.....	383,318	358,785	1900.....	4,468,225	2,740,362	1911.....	32,559,044	17,355,272
1890.....	400,687	419,118	1901.....	5,539,192	3,265,354	1912.....	31,955,560	19,440,165
1891.....	414,523	409,549	1902.....	4,291,317	2,238,351	1913.....	31,845,803	19,040,924
1892.....	310,651	272,130	1903.....	3,198,581	1,709,642	1914.....	28,449,821	15,933,631
1893.....	—	330,128	1904.....	3,577,526	2,047,095	1915.....	26,625,960	13,228,842
1894.....	847,697	534,049	1905.....	6,000,023	3,621,133	1916.....	25,459,741	16,717,121
1895.....	1,578,275	1,030,299	1906.....	8,473,379	5,659,455	1917.....	22,221,274	18,091,895
1896.....	3,205,343	2,149,503	1907.....	12,779,799	8,348,659	1918.....	21,383,979	20,693,704
1897.....	5,558,456	3,323,395	1908.....	22,106,233	11,686,239	1919.....	16,020,657	17,802,474
						1920.....	13,330,357	13,450,330
						1921 <sup>1</sup> .....	13,490,747	8,452,493

**93.—Quantity and Value of Silver produced in Canada, by Provinces, during the Calendar Years 1901-1921.**

Year.	Ontario.		Quebec.		British Columbia.		Yukon Territory.	
	Oz.	\$	Oz.	\$	Oz.	\$	Oz.	\$
1901.....	151,400	89,250	41,459	24,440	5,151,333	3,036,711	195,000	114,953
1902.....	145,000	75,632	42,500	22,168	3,917,917	2,043,586	185,900	96,985
1903.....	17,777	9,502	28,600	15,287	2,996,204	1,601,471	156,000	83,262
1904.....	206,875	118,376	15,000	8,583	3,222,481	1,843,935	133,170	76,201
1905.....	2,451,356	1,479,442	19,620	11,841	3,439,417	2,075,757	89,630	54,093
1906.....	5,401,766	3,607,894	17,686	11,813	2,990,262	1,997,226	63,665	42,522
1907.....	9,982,363	6,521,178	16,000	10,452	2,745,448	1,793,519	35,988	23,510
1908.....	19,398,545	10,254,847	13,299	7,030	2,651,389	1,391,058	63,000	33,304
1909.....	24,822,099	12,784,126	13,233	6,815	2,649,141	1,364,387	45,000	23,176
1910.....	30,366,366	16,241,755	7,593	4,061	2,407,887	1,287,883	81,418	46,756
1911.....	30,540,754	16,279,443	18,435	9,827	1,887,147	1,005,924	112,708	60,078
1912.....	29,214,025	17,772,352	9,465	5,758	2,651,002	1,612,737	81,068	49,318
1913.....	28,411,261	16,987,377	34,573	20,672	3,312,343	1,980,483	87,626	52,393
1914.....	25,139,214	13,779,055	57,737	31,646	3,159,897	1,731,971	92,973	50,599
1915.....	22,748,609	11,302,419	63,450	31,624	3,565,852	1,771,658	248,049	123,241
1916.....	21,608,158	14,188,133	98,610	64,748	3,392,872	2,227,794	360,101	236,446
1917.....	19,301,835	15,714,975	136,194	110,885	2,655,994	2,162,430	119,605	97,379
1918.....	17,198,737	16,643,562	178,675	172,907	3,921,336	3,794,755	71,915	69,594
1919.....	12,117,878	13,465,628	140,926	156,600	3,713,537	4,126,556	27,556	30,621
1920.....	9,907,626	9,996,795	61,003	61,552	3,327,028	3,356,971	19,190	19,363
1921 <sup>1</sup> .....	9,709,156	6,083,175	38,084	23,861	3,350,357	2,099,133	393,092	246,288

<sup>1</sup>Subject to revision.

**93.—Quantity and Value of Silver produced in Canada, by Provinces, during the Calendar Years 1901-1921—concluded.**

Year.	Nova Scotia.		New Brunswick.		Manitoba.	
	Oz.	\$	Oz.	\$	Oz.	\$
1917.....	—	—	445	363	7,201	5,863
1918.....	—	—	—	—	13,316	12,886
1919.....	—	—	—	—	20,760	23,069
1920.....	—	—	—	—	15,510	15,610
1921 <sup>1</sup> .....	25	16	—	—	33	20

NOTE.—For the years 1887 to 1900, see Canada Year Book, 1916-1917, p. 271.

**94.—Quantity and Value of Copper produced in Canada, by Provinces, during the Calendar Years 1901-1921.**

Year.	Ontario.		Quebec.		British Columbia.		Total.	
	Lb.	\$	Lb.	\$	Lb.	\$	Lb.	\$
1901.....	8,695,831	1,401,507	1,527,442	246,178	27,603,746	4,448,896	37,827,019	6,096,581
1902.....	7,408,202	861,278	1,640,000	190,666	29,636,057	3,445,488	38,684,259	4,497,432
1903.....	7,172,533	949,285	1,152,000	152,467	34,359,921	4,547,735	42,684,454	5,649,487
1904.....	4,913,594	630,070	760,000	97,455	35,710,128	4,579,110	41,383,722	5,306,635
1905.....	8,779,259	1,368,686	1,621,243	262,752	37,692,251	5,876,222	48,092,753	7,497,660
1906.....	10,638,231	2,050,838	1,981,169	381,930	42,990,488	8,287,706	55,609,888	10,720,474
1907.....	14,104,337	2,821,432	1,517,990	303,659	40,832,720	8,168,177	56,455,047	11,293,268
1908.....	15,005,171	1,981,883	1,282,024	169,330	47,274,614	6,244,031	63,561,809	8,395,244
1909.....	15,746,699	2,044,237	1,088,212	141,272	35,658,952	4,629,245	52,493,863	6,814,754
1910.....	19,259,016	2,453,213	877,347	111,757	35,270,006	4,492,693	55,692,369 <sup>2</sup>	7,094,094 <sup>2</sup>
1911.....	17,932,263	2,219,297	2,436,190	301,503	35,279,558	4,366,198	55,648,011	6,886,998
1912.....	22,250,601	3,635,971	3,282,210	536,346	50,526,656	8,256,561	77,832,127	12,718,548
1913.....	25,885,929	3,952,522	3,455,887	527,679	45,791,579	6,991,916	76,976,925	11,753,606
1914.....	28,948,211	3,937,536	4,201,497	571,488	41,219,202	5,606,636	75,735,960	10,301,606
1915.....	39,361,464	6,799,693	4,197,482	725,115	56,692,988	9,793,714	100,785,150	17,410,635
1916.....	44,997,035	12,240,094	5,703,347	1,551,424	63,642,550	17,312,046	117,150,028	31,867,150
1917.....	42,867,774	11,651,461	5,015,560	1,363,229	57,730,959	15,691,275	109,227,332 <sup>3</sup>	29,687,989 <sup>3</sup>
1918.....	47,074,475	11,593,502	5,869,649	1,445,577	62,865,681	15,482,560	118,769,434	29,250,536
1919.....	24,346,623	4,550,627	2,691,695	503,105	44,502,079	8,317,884	75,053,581	14,028,265
1920.....	32,059,993	5,596,392	880,638	153,724	45,319,771	7,911,019	81,600,691	14,244,217
1921 <sup>1</sup> .....	12,821,385	1,602,930	352,308	44,045	34,447,127	4,306,580	47,620,820	5,953,555

PRODUCTION OF COPPER IN MANITOBA AND YUKON TERRITORY (INCLUDED IN TOTALS).

Year.	Manitoba. (included in totals).		Yukon Territory. (included in totals).	
	Lb.	\$	Lb.	\$
1912.....	—	—	1,772,660	289,670
1913.....	—	—	1,843,530	281,489
1914.....	—	—	1,367,050	185,946
1915.....	—	—	533,216	92,113
1916.....	—	—	2,807,096	763,586
1917.....	1,116,000	303,329	2,460,079	668,650
1918.....	2,339,751	576,234	619,878	152,663
1919.....	3,348,000	625,775	165,184	30,874
1920.....	3,062,577	534,604	277,712	48,475
1921 <sup>1</sup> .....	—	—	—	—

NOTE.—For the years 1886 to 1900, see Canada Year Book, 1916-17, p. 272.

<sup>1</sup>Subject to revision.

<sup>2</sup>Includes 236,000 lb., valued at \$36,431, produced in Nova Scotia and Yukon Territory, not given separately.

<sup>3</sup>Includes 36,960 lb., valued at \$10,045, from New Brunswick and Alberta, not given separately.



**95.—Quantity and Value of Nickel produced in Canada during the Calendar Years 1889-1921.**

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Lb.	\$		Lb.	\$		Lb.	\$
1889.....	830,477	498,236	1900	7,080,227	3,327,707	1911	34,098,744	10,229,623
1890.....	1,435,742	933,232	1901	9,189,047	4,594,523	1912	44,841,542	13,452,463
1891.....	4,035,347	2,421,208	1902	10,693,410	5,025,903	1913	49,676,772	14,903,032
1892.....	2,413,717	1,399,956	1903	12,505,510	5,002,204	1914	45,517,937	13,655,381
1893.....	3,982,982	2,071,151	1904	10,547,883	4,219,153	1915	68,308,657	20,492,597
1894.....	4,907,430	1,870,958	1905	18,876,315	7,550,526	1916	82,958,564	29,035,498
1895.....	3,888,525	1,360,984	1906	21,490,955	8,948,834	1917	82,330,280	33,732,112
1896.....	3,397,113	1,188,990	1907	21,189,793	9,535,407	1918	92,507,293	37,002,917
1897.....	3,997,647	1,399,176	1908	19,143,111	8,231,538	1919	44,544,883	17,817,953
1898.....	5,517,690	1,820,838	1909	26,282,991	9,461,877	1920	61,335,706	24,534,282
1899.....	5,744,000	2,067,840	1910	37,271,033	11,181,310	1921 <sup>1</sup>	19,293,060	6,752,571

**96.—Production of Principal Minerals in Canada for the Calendar Years 1909-1921.**

Year.	Lead.		Iron Ore Shipments.		Zinc Production.	
	Lb.	\$	Tons.	\$	Tons.	\$
1909.....	45,857,424	1,692,139	268,043	659,316	—	—
1910.....	32,987,508	1,216,249	259,418	574,362	—	—
1911.....	23,784,969	827,717	210,344	522,319	—	—
1912.....	35,763,476	1,597,554	215,883	523,315	—	—
1913.....	37,662,703	1,754,705	307,634	629,843	—	—
1914.....	36,337,765	1,627,568	244,854	542,041	—	—
1915.....	46,316,450	2,593,721	398,112	774,427	—	—
1916.....	41,497,615	3,532,692	275,176	715,107	11,682	2,991,623
1917.....	32,576,281	3,628,020	215,302	758,621	14,834	2,640,817
1918.....	51,398,002	4,754,315	211,608	885,893	17,542	2,862,436
1919.....	43,827,699	3,053,037	197,170	693,386	16,097	2,362,448
1920.....	35,953,717	3,214,262	129,072	517,987	19,932	3,057,961
1921 <sup>1</sup> .....	66,679,592	3,828,742	58,508	227,134	26,544	2,471,310

FIG IRON.

Year.	Nova Scotia.		Quebec.		Ontario.		Totals.	
	Tons.	\$	Tons.	\$	Tons.	\$	Tons.	\$
1909.....	354,380	3,453,800	4,770	125,623	407,012	6,002,441	757,162	9,581,864
1910.....	350,287	4,203,444	3,237	85,255	447,273	6,956,923	800,797	11,245,622
1911.....	390,242	4,682,904	658	17,282	526,635	7,606,939	917,535	12,307,125
1912.....	424,994	6,374,910	—	—	589,593	8,176,089	1,014,587	14,550,999
1913.....	480,068	7,201,020	—	—	648,899	9,338,992	1,128,967	16,540,012
1914.....	227,052	2,951,676	—	—	556,112	7,051,180	783,164	10,002,856
1915.....	420,275	5,463,575	—	—	493,500	5,910,624	913,775	11,374,199
1916.....	470,055	7,050,825	—	—	699,202	9,700,073	1,169,257	16,750,898
1917.....	472,147	10,387,234	—	—	698,333	14,638,726	1,170,480	25,025,960
1918.....	415,870	10,451,400	7,449	419,521	272,232	22,624,250	1,195,551	33,495,171
1919.....	285,987	7,141,641	7,701	331,797	624,993	17,104,151	917,781	24,577,589
1920.....	332,493	7,687,614	8,835	379,343	749,068	22,252,062	1,090,396	30,319,024
1921 <sup>1</sup> .....	169,504	4,407,104	683	17,758	495,489	12,882,714	665,676	17,307,576

<sup>1</sup> Subject to revision.

<sup>2</sup> Includes a small tonnage made in electric furnaces in British Columbia.

**96.—Production of Principal Minerals in Canada for the Calendar Years 1909-1921**  
—concluded.

COAL.

Year.	Nova Scotia.	New Brunswick.	Saskatchewan.	Alberta.	British Columbia.	Yukon Territory.	Total production.	Value.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	\$
1909.....	5,652,089	49,029	192,125	1,994,741	2,606,127	7,364	10,501,475	24,781,236
1910.....	6,431,142	55,455	181,156	2,894,469	3,330,745	16,185	12,909,152	30,909,779
1911.....	7,004,420	55,781	206,779	1,511,036	2,542,532	2,840	11,323,388	26,467,646
1912.....	7,783,888	44,780	225,342	3,240,577	3,208,997	9,245	14,512,829	36,019,044
1913.....	7,980,073	70,311	212,897	4,014,755	2,714,420	19,722	15,012,178	37,334,940
1914.....	7,370,924	98,049	232,299	3,683,015	2,239,799	13,443	13,637,529	33,471,801
1915.....	7,463,370	127,391	240,107	3,360,818	2,065,613	9,724	13,267,023	32,111,182
1916.....	6,912,140	143,540	281,300	4,559,034	2,584,061	3,300	14,483,395	38,817,481
1917.....	6,327,091	189,095	355,445	4,736,368	2,433,888	4,872	14,046,759	43,199,831
1918.....	5,818,562	268,212	346,847	5,972,816	2,568,589	2,900	14,977,926	55,192,896
1919.....	5,720,373	179,108	350,169	4,964,535	2,435,933	1,100	13,681,218	54,413,349
1920.....	6,395,545	161,164	349,860	6,859,346	2,856,920	763	16,623,598	77,326,855
1921 <sup>1</sup> .....	5,734,928	188,192	335,632	5,909,217	2,890,291	233	15,057,262	72,451,656

**97.—Production of Asbestos and Asbestic in Canada for the Calendar Years 1909-1921.**

Year.	Asbestos.		Asbestic.		Total.	
	Tons.	\$	Tons.	\$	Tons.	\$
1909.....	63,349	2,284,587	23,951	17,188	87,300	2,301,775
1910.....	77,508	2,555,974	24,707	17,629	102,215	2,573,603
1911.....	101,393	2,922,062	26,021	21,046	127,414	2,943,108
1912.....	111,561	3,117,572	24,740	19,707	136,301	3,137,279
1913.....	136,951	3,830,909	24,135	19,016	161,086	3,849,925
1914.....	96,542	2,892,266	21,031	17,540	117,573	2,909,806
1915.....	111,142	3,553,166	25,700	21,819	136,842	3,574,985
1916.....	133,439	5,199,797	20,710	29,072	154,149	5,228,869
1917.....	135,502	7,183,099	18,279	47,284	153,781	7,230,383
1918.....	141,462	8,936,804	16,797	33,993	158,259	8,970,797
1919.....	136,765	10,909,452	22,471	65,917	159,236	10,975,369
1920.....	167,731	13,677,841	20,956	57,601	188,687	13,735,442
1921 <sup>1</sup> .....	92,761	4,906,230	2	2	92,761	4,906,230

**98.—Production of Cement in Canada for the Calendar Years 1902-1921.**

Year.	Natural rock cement.		Portland cement.		Total cement.	
	brl.	\$	brl.	\$	brl.	\$
1902.....	127,931	98,932	594,594	1,028,618	722,525	1,127,550
1903.....	92,252	74,655	627,741	1,150,592	719,993	1,225,247
1904.....	56,814	50,247	910,358	1,287,992	967,172	1,338,239
1905.....	14,184	10,274	1,346,548	1,913,740	1,360,732	1,924,014
1906.....	8,610	6,052	2,119,764	3,164,807	2,128,374	3,170,859
1907.....	5,775	4,043	2,436,093	3,777,328	2,441,868	3,781,371
1908.....	1,044	815	2,665,289	3,709,139	2,666,333	3,709,954
1909.....	—	—	4,067,709	5,345,802	4,067,709	5,345,802
1910.....	—	—	4,753,975	6,412,215	4,753,975	6,412,215
1911.....	—	—	5,692,915	7,644,537	5,692,915	7,644,537
1912.....	—	—	7,132,732	9,106,556	7,132,732	9,106,556
1913.....	—	—	8,658,805	11,019,418	8,658,805	11,019,418
1914.....	—	—	7,172,480	9,187,924	7,172,480	9,187,924
1915.....	—	—	5,681,032	6,977,024	5,681,032	6,977,024
1916.....	—	—	5,369,560	6,547,728	5,369,560	6,547,728
1917.....	—	—	4,768,488	7,724,246	4,768,488	7,724,246
1918.....	—	—	3,591,481	7,076,503	3,591,481	7,076,503
1919.....	—	—	4,995,257	9,802,433	4,995,257	9,802,433
1920.....	—	—	6,651,980	14,798,070	6,651,980	14,798,070
1921 <sup>1</sup> .....	—	—	5,752,885	14,195,143	5,752,885	14,195,143

<sup>1</sup>Subject to revision.<sup>2</sup>Included with asbestos.

**IRON BLAST FURNACES IN CANADA IN 1921—**

Of 20 blast furnaces in Canada, 8 were in blast in 1921 for varying periods of time. The total daily capacity of the twenty furnaces was 3,908 gross tons. The companies, with numbers and capacities of furnaces, were as follows:—

DOMINION IRON & STEEL Co., of Sydney, C.B.: Six completed furnaces; one of 315 tons capacity, two of 230 tons, and three of 215 tons capacity each per day. For the first five months only one furnace was in blast; a second furnace started operations in June and blew out during December, four furnaces being idle throughout the year.

NOVA SCOTIA STEEL & COAL Co., LTD., New Glasgow, N.S.: Two stacks and one set of stoves at Sydney Mines, C.B., with a daily capacity of 223 and 250 tons. Idle throughout the year.

LONDONDERRY IRON & MINING Co., LTD., Londonderry, N.S.: One furnace of 100 tons daily capacity. Idle throughout the year. Not operated since 1908.

MIDLAND IRON AND STEEL Co., LTD., Midland, Ont.: One furnace of 120 tons daily capacity, operated during January, part of February and out of blast for the remainder of the year.

PARRY SOUND IRON Co., LTD., Midland, Ont.: One furnace at Parry Sound of 90 tons capacity. Purchased from Standard Iron Co. and being rebuilt. Idle since 1913.

STANDARD IRON Co., LTD., Deseronto, Ont.: One furnace at Deseronto of 60 tons daily capacity. Idle throughout the year.

THE STEEL Co. OF CANADA. LTD., Hamilton, Ont.: Two furnaces with a daily capacity of 375 and 230 tons. One furnace remained in blast for the entire year and the other operated part time for the first four months only.

**ELECTRIC FURNACES IN 1921—**

THE ELECTRO METALS LTD., of Welland, Ont., equipped with 8 electric furnaces, were engaged in producing ferro-silicon of 15 p.c., 50 p.c., 75 p.c., and 80 p.c. grades.

THE ALGOMA STEEL CORPORATION, Sault Ste. Marie, Ont.: Producing spiegel-eisen in blast furnaces.

The following firms were also engaged during 1921 in recovering low grade ferro-silicon as a by-product in the manufacture of artificial abrasives in electric furnaces: The Abrasive Co. of Canada, Ltd., Hamilton; The Canadian Carborundum Co., Niagara Falls, Ont.

**STEEL FURNACES IN 1921—**

The following firms were engaged in producing steel ingots and castings in Canada during 1921:—

THE ALGOMA STEEL CORPORATION, Sault Ste. Marie, Ont.: Basic open hearth steel furnaces, eight of 50, one of 60 and three of 75 G.T. capacity each per heat or melt.

BALDWIN'S CANADIAN STEEL CORPORATION, Toronto, Ont.: Nine Heroult electric steel furnaces with a capacity of 6 tons each per heat.

BEAUCHEMIN & FILS, LTD., Sorel, P.Q.: Two Baillet's converters with a capacity of 3,000 pounds each per blow.

CANADIAN STEEL FOUNDRIES, LTD., Pointe St. Charles, P.Q.: One standard Bessemer converter of 1½ tons capacity per blow.

CANADIAN STEEL FOUNDRIES, LTD., Longue Pointe, P.Q.: Two basic open hearth steel furnaces with a capacity of 25 tons each per heat.

CANADIAN STEEL FOUNDRIES, LTD., Welland, Ont.: Three basic open hearth steel furnaces with a capacity of 20 tons each per heat.

THOS. DAVIDSON MFG. Co., LTD., Montreal, P.Q.: Four electric steel furnaces with a capacity per heat of 6 tons each.

DOMINION FOUNDRIES AND STEEL LTD., Hamilton, Ont.: Two Heroult electric steel furnaces with a capacity per heat of 6 tons each.

DOMINION IRON AND STEEL CO., LTD., Sydney, N.S.: Two basic open hearth steel furnaces with a capacity per heat of 100 tons each, and ten B.O.H. steel furnaces with a capacity per heat of 50 tons each.

LA COMPAGNIE F. X. DROLET, Quebec, P.Q.: One side blown Baillot converter with a capacity of one ton per blow.

HULL IRON AND STEEL FOUNDRIES, LTD., Hull, P.Q.: One Heroult electric steel furnace with a capacity of 5 tons per heat; two Tropenas converters with a capacity of 1½ tons each per blow.

WM. KENNEDY & SONS, Collingwood, Ont.: One 4½ ton three phase non-tilting electric furnace.

MANITOBA ROLLING MILL CO., LTD., Selkirk, Man.: one B.O.H. steel furnace with a capacity of 10 tons per heat.

THE MANITOBA STEEL FOUNDRIES, LTD., Montreal, P.Q.: One Snyder single phase of 2½ tons capacity per heat.

NOVA SCOTIA STEEL AND COAL CO., LTD., Sydney Mines, N.S.: Five B.O.H. steel furnaces, 3 with a capacity of 54 tons each, and 2 of 45 tons each per heat.

OPSAL STEEL CO., LTD., Vancouver, B.C.: One 2 ton electric steel furnace.

STEEL COMPANY OF CANADA, LTD., Hamilton, Ont.: Eleven B.O.H. steel furnaces, 4 of 75 tons each, 5 of 50 tons each, and 2 with a capacity per heat of 25 tons.

SWEDISH CRUCIBLE STEEL COMPANY OF CANADA, LTD., Windsor, Ont.: One side blown Bessemer with a capacity of 2 tons, three crucible steel furnaces of 18 pots per furnace and the same number of pots may be used at a heat.

The following firms were also engaged in producing steel in 1921:—Canadian Brakeshoe Co., Sherbrooke, P.Q.; Canadian Electric Steel Co., Montreal, P.Q.; Joliette Castings & Forgings, Ltd., Joliette, P.Q.; National Farming Machinery, Ltd., Montmagny, P.Q.; Vancouver Engineering Works, Ltd., Vancouver, B.C.

**Mines Departments of Provincial Governments.**—In addition to the Mines Department of the Dominion Government, from whose reports the foregoing tables and information have been compiled, there are Departments of Mines of the Provincial Governments of Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia, as well as the Mines Branch of the Department of Public Works of the Provincial Government of Alberta.

**Nova Scotia.**—In Nova Scotia, the principal mining product is coal. According to the annual report of the Department of Public Works and Mines for the year ended Sept. 30, 1921, the quantity of coal raised in that year was 5,373,230 long tons, as compared with 5,687,970 in 1920 (decrease 314,740), 5,004,757 in 1919, 5,265,404 tons in 1918, 5,803,661 tons in 1917, and 6,496,472 tons in 1916. While the total number of men employed at the collieries in 1921 was 12,276, an increase of 968 over the previous year, the lack of demand for coal caused loss of working time at the mines, the number of colliery days worked being only 3,021,120, as compared with 3,375,954 in 1920. The production of other minerals in 1921 was, in short tons, as follows, the corresponding figures of 1920 being given within parentheses: pig iron 158,611 (280,586); steel ingots, 203,662 (361,742); limestone, 78,932 (249,993); coke, 233,799 (382,608); gypsum, 185,934 (174,520); building stone, 4,507 (8,040). The number of bricks made was 11,993,790, as compared with 18,350,354 in 1920, and the production of drain-pipe and tile was 826,254 feet, as against 1,164,270 feet in 1920. The production of gold was 379 oz., as compared with 744 oz. in 1920.



**New Brunswick.**—The annual report for the year ended October 31, 1921, of the Minister of Lands and Mines, shows that the quantity of coal shipped in the year 1920-21 was 140,142 long tons, as compared with 135,297 long tons in 1919-20. The output of gypsum from the Hillsboro quarries was about 45,000 tons. Crude oil to the amount of 229,434 gallons was produced by the New Brunswick Gas and Oilfields, Ltd., during the year, an increase of 54,607 gallons over the previous year.

**Quebec.**—The annual report on mining operations in the province of Quebec shows that the value of the mineral production of the province for the calendar year 1921 amounted to \$15,522,988, as compared with \$28,392,939 for 1920, the latter being the highest figure on record; the 1921 figures show a decline of no less than 45 p.c., due to the great depression and the low prices which prevailed. Of the total, the products of the mines proper amounted in 1921 to \$5,634,177, of which \$5,549,282 was of non-metallic minerals, as compared with \$15,771,852 in 1920; the product of metallic minerals was \$84,895, as compared with \$483,888; building materials were valued at \$9,888,811, as compared with \$12,054,857. The values of the principal products in 1921, with the comparative values for 1920 given in parentheses, were as follows: asbestos, \$5,199,789 (\$14,749,048); cement, \$5,410,276 (\$6,545,053); brick, \$1,198,471 (\$1,956,473); limestone, \$1,523,027 (\$1,584,316); lime \$624,574 (\$682,477); granite, \$369,122 (\$494,372); marble, \$167,664 (\$228,353); building sand, \$263,813 (\$206,433). Table 99 shows the annual value of the mineral production of Quebec for the years 1900 to 1921.

99.—Value of the Mineral Production of Quebec, 1900-21.

Year.	\$	Year.	\$	Year.	\$
1900.....	2,546,076	1907.....	5,391,368	1914.....	11,732,783
1901.....	2,997,731	1908.....	5,458,998	1915.....	11,465,873
1902.....	2,985,463	1909.....	5,552,062	1916.....	13,287,024
1903.....	2,772,762	1910.....	7,323,281	1917.....	16,189,179
1904.....	3,023,568	1911.....	8,679,786	1918.....	18,707,762
1905.....	3,750,300	1912.....	11,187,110	1919.....	20,813,670
1906.....	5,019,932	1913.....	13,119,811	1920.....	28,392,939
				1921.....	15,522,988

**Ontario.**—Preliminary figures compiled by the Ontario Bureau of Mines show that the total value of the mineral production of Ontario in the calendar year 1921 was \$48,128,387, as compared with \$73,076,747 in 1920, \$58,883,916 in 1919, \$80,308,972 in 1918, \$72,093,832 in 1917, \$65,303,822 in 1916 and \$54,245,679 in 1915. The value for 1920 was among the highest on record and the falling off in 1921 is attributed to the depression. Of the total value in 1921, \$27,574,202 represents the value of the metallic and \$20,554,185 the value of the non-metallic production. Gold shows a production of 709,509 oz., of the value of \$14,624,085, as compared with 565,283 oz., valued at \$11,686,043, in 1920. The total shipments of silver amounted to 8,412,059 fine oz., of the value of \$5,497,160, as

compared with 11,065,415 oz. in 1920, of the value of \$10,873,496, showing a considerable decline in value per oz. Table 100 shows the total production and value of silver at the Cobalt and Gowganda camp each year from 1904 to 1921. The total for the 18 years is 322,858,563 oz., of the value of \$198,099,336. The value of the output of non-metallic products for 1921 was 17 p.c. less than in 1920. This decrease in the value of non-metallic minerals was largely due to the decreased production of brick and building stone, while the large decline in the value of metals produced is explained by the decline of the value of nickel production from \$5,003,631 in 1920 to \$2,010,750 in 1921, and of silver from \$10,873,496 to \$5,497,160.

**100.—Production of Silver at the Cobalt and Gowganda Camp, Ontario, 1904-21.**

Year.	Oz.	Value.	Average price per oz.	Year.	Oz.	Value.	Average price per oz.
		\$	Cents.			\$	Cents.
1904.....	206,875	111,887	57.2	1914.....	29,681,975	16,553,981	57.8
1905.....	2,451,356	1,360,503	60.4	1915.....	25,162,841	12,765,461	54.8
1906.....	5,401,766	3,667,551	66.4	1916.....	24,746,534	12,135,816	49.69
1907.....	10,023,311	6,155,391	67.5	1917.....	19,915,090	12,643,175	65.66
1908.....	19,437,875	9,133,378	52.9	1918.....	19,401,893	16,121,013	81.42
1909.....	25,897,825	12,461,576	51.5	1919.....	17,661,694	17,341,790	98.20
1910.....	30,645,181	15,478,047	53.5	1920.....	11,214,317	12,738,994	111.12
1911.....	31,507,791	15,953,847	53.3	1921.....	10,846,321	10,654,471	100.90
1912.....	30,243,859	17,408,935	60.8		8,279,320	5,413,520	62.65
<b>Total.....</b>					<b>322,858,563</b>	<b>198,099,336</b>	<b>61.36</b>

**Alberta.**—The Mines Branch of the Department of Public Works states that the total production of coal in Alberta during the calendar year 1921 was 5,937,195 short tons, as compared with 6,908,923 tons in 1920, a decrease of 971,728 tons. Of natural gas the production in the province was, according to the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, 5,079,044 thousand cubic feet as compared with 5,633,442 thousand cubic feet in 1920.

**British Columbia.**—According to the Annual Report for 1921 of the Provincial Mineralogist, the total value of the mineral production of British Columbia from 1852 to 1921 was \$734,259,619, distributed among the different mineral products as follows: Placer gold, \$76,177,403; lode gold, \$105,557,977; silver, \$55,259,485; lead, \$48,330,575; copper, \$166,393,488; zinc, \$21,848,531; coal and coke, \$225,409,505; building stone, bricks, etc., \$34,072,016; miscellaneous minerals, etc., \$1,210,639. Table 101 shows the value of the total mineral production of the province from 1852 to 1921, inclusive. The value of the total mineral production for the calendar year 1921 was \$28,066,641, a decrease from that of the previous year of \$7,476,443, or 21 p.c. The principal mineral products of British Columbia are gold, silver, lead, copper, zinc and coal. Table 102 shows the quantity and value of the mineral production of British Columbia for the three calendar years 1919-1921. The decrease in 1921 was in the main due to a decline both in the quantity and value of silver, copper and zinc production.

**101.—Value of Total Mineral Production of British Columbia, 1852-1921.**

Year.	Value.	Year.	Value.	Year.	Value.
	\$		\$		\$
1852-1892.....	81,090,069	1902.....	17,486,550	1912.....	32,440,800
1893.....	3,588,413	1903.....	17,495,954	1913.....	30,296,398
1894.....	4,225,717	1904.....	18,977,359	1914.....	26,388,825
1895.....	5,643,042	1905.....	22,461,325	1915.....	29,447,508
1896.....	7,507,956	1906.....	24,980,546	1916.....	42,290,462
1897.....	10,455,268	1907.....	25,882,560	1917.....	37,010,392
1898.....	10,906,861	1908.....	23,851,277	1918.....	41,782,474
1899.....	12,393,131	1909.....	24,443,025	1919.....	33,296,313
1900.....	16,344,751	1910.....	26,377,066	1920.....	35,543,084
1901.....	20,086,780	1911.....	23,499,072	1921.....	28,066,641
				<b>Total.....</b>	<b>734,259,619</b>

**102.—Quantity and Value of Mineral Products in British Columbia for the Calendar Years 1919-21.**

Products.	1919.		1920.		1921.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
Gold, placer..... oz.	14,325	286,500	11,080	221,600	11,660	233,200
Gold, lode..... "	152,426	3,150,645	120,048	2,481,392	135,663	2,804,154
Silver..... "	3,403,119	3,592,673	3,377,849	3,235,980	2,673,389	1,591,201
Lead..... lb.	29,475,968	1,526,855	39,331,218	2,816,115	41,402,288	1,693,354
Copper..... "	42,459,339	7,939,896	44,887,676	7,832,899	39,036,993	4,879,624
Zinc..... "	56,737,651	3,540,429	47,208,268	3,077,979	49,419,372	1,952,065
Coal..... ton	2,267,541	11,337,705	2,595,125	12,975,625	2,483,995	12,419,975
Coke..... "	91,138	637,966	67,792	474,544	59,434	416,038
Miscellaneous products.. \$	-	1,283,644	-	2,426,950	-	2,077,030
<b>Total..... \$</b>	<b>-</b>	<b>33,296,313</b>	<b>-</b>	<b>35,543,084</b>	<b>-</b>	<b>28,066,641</b>

<sup>1</sup>Long tons of 2,240 lb.

**World's Production of Gold and Silver.**—Table 103, taken from the Annual Report for 1921 of the Director of the United States Mint, gives by countries the quantity and value of the world's production of gold and silver for 1919 and 1920. For 1920 the total production of gold amounted to 16,203,123 fine oz., of the value of \$334,808,866, as compared with 17,629,937 fine oz., valued at \$365,789,684 in 1919, and 18,416,386 fine oz., valued at \$380,700,489 in 1918, the decline being due to the increasing cost of operating gold mines during these years, while the value of gold per ounce remained the same. By countries, the Union of South Africa (Transvaal, Cape Colony and Natal) led in 1920 with a production of 8,158,455 ounces, or slightly more than half the total. The United States came second, with a production of 2,476,166 oz., the Commonwealth of Australia third with 943,768 oz., Canada fourth with 765,007 oz., Mexico fifth with 738,472 oz., and Southern Rhodesia sixth with 552,498 oz. The world's total production of silver in 1920 was 174,749,702 fine oz., valued at \$178,001,005, as compared with 176,459,648 oz., valued at \$197,633,675 in 1919, being a slight decline in quantity and a substantial decline in value, the average price of silver in New York being \$1.0194 per oz., in 1920, as compared with

\$1.12086 in 1919. By countries, the lead in silver production in 1920 was taken by Mexico with 66,662,253 oz., followed by the United States with 55,361,573 oz., Canada coming third with 13,330,557 oz.

**103.—Quantity and Value of the World's Production of Gold and Silver for the Calendar Years 1919 and 1920.**

(From the Annual Report of the Director of the United States Mint.)

Countries.	1919.				1920.			
	Gold.		Silver.		Gold.		Silver.	
	fine oz.	\$	fine oz.	\$	fine oz.	\$	fine oz.	\$
North America—								
Canada.....	766,764	15,850,423	16,020,657	17,802,474	765,007	15,814,098	13,330,557	13,450,330
United States....	2,918,628	60,333,400	56,682,445	63,533,652	2,476,166	51,186,900	55,361,573	56,435,588
Mexico.....	758,354	15,676,565	65,904,224	73,870,068	738,472	15,265,568	66,662,253	67,955,501
<b>Total.....</b>	<b>4,443,746</b>	<b>91,860,388</b>	<b>138,607,326</b>	<b>155,206,194</b>	<b>3,979,645</b>	<b>82,266,566</b>	<b>135,354,383</b>	<b>137,841,119</b>
Central American States and West Indies.....	159,638	3,300,000	2,800,000	3,138,436	145,125	3,000,000	2,700,000	2,752,380
South America—								
Argentina.....	193	4,000	25,000	28,022	145	3,000	20,000	20,388
Bolivia.....	242	5,000	2,435,000	2,729,318	242	5,000	2,200,000	2,242,680
Brazil.....	96,750	2,000,000	25,000	28,022	87,075	1,800,000	20,000	20,388
Chile.....	37,007	765,000	1,900,000	2,129,653	33,862	700,000	1,800,000	1,834,920
Colombia.....	290,251	6,000,000	494,331	554,080	280,575	5,800,000	480,000	489,312
Ecuador.....	38,700	800,000	40,000	44,835	36,281	750,000	35,000	35,679
Guiana—								
British.....	16,216	335,214			8,840	182,749		
Dutch.....	15,932	329,343	8,000	8,967	14,512	300,000	8,000	8,155
French.....	53,212	1,100,000			43,537	900,000		
Peru.....	65,232	1,348,465	9,821,729	11,008,881	62,757	1,297,302	9,196,282	9,374,690
Uruguay.....	484	10,000			387	8,000		
Venezuela.....	29,025	600,000	4,100	4,596	24,187	500,000	4,000	4,078
<b>Total.....</b>	<b>643,244</b>	<b>13,297,022</b>	<b>14,753,160</b>	<b>16,536,374</b>	<b>592,400</b>	<b>12,246,051</b>	<b>13,763,282</b>	<b>14,030,390</b>
Europe—								
Austria.....	—	—	15,432	17,297	—	—	13,985	14,256
Czecho-Slovakia	6,076	125,602	580,918	651,134	8,761	181,106	680,069	693,262
France.....	7,298	150,863	12,000	13,450	7,300	150,904	12,000	12,233
Great Britain....	—	—	68,415	76,684	—	—	50,000	50,970
Greece.....	225	4,651	160,000	179,339	193	4,000	150,000	152,910
Italy.....	739	15,276	350,000	392,305	726	15,000	350,000	356,790
Norway.....	—	—	312,820	350,631	—	—	346,706	353,432
Russia and Si- beria.....	532,115	10,999,791	400,000	448,348	70,000	1,447,028	50,000	50,970
Serbia.....	—	—	20,000	22,417	—	—	15,000	15,290
Spain.....	—	—	1,548,228	1,735,362	—	—	3,191,387	3,253,301
Sweden.....	482	9,964	31,507	35,315	484	10,000	30,000	30,582
Turkey.....	—	—	100,000	112,087	—	—	100,000	101,940
<b>Total.....</b>	<b>546,935</b>	<b>11,306,147</b>	<b>3,599,320</b>	<b>4,034,362</b>	<b>87,461</b>	<b>1,808,038</b>	<b>4,989,147</b>	<b>5,085,936</b>
Australasia—								
New South Wales.....	65,839	1,361,013	5,886,947	6,598,502	48,907	1,010,997	5,886,947	6,001,154
Northern Terri- tory.....	589	12,176	—	—	800	16,537	—	—
Queensland.....	121,030	2,501,912	92,098	103,174	114,181	2,360,327	274,235	279,555
South Australia..	3,224	66,646	561	629	3,000	62,015	1,005	1,024
Victoria.....	135,428	2,799,545	6,121	6,861	152,792	3,158,486	6,231	6,352
West Australia...	734,066	15,174,488	223,332	250,326	617,842	12,771,925	223,332	227,665
New Zealand.....	222,063	4,590,449	453,561	508,390	188,337	3,893,265	453,567	462,366
Tasmania.....	7,686	158,884	525,343	588,841	6,246	129,116	623,359	635,452
Papua.....	11,919	246,388	—	—	11,919	246,388	—	—
<b>Total.....</b>	<b>1,301,844</b>	<b>26,911,501</b>	<b>7,187,963</b>	<b>8,056,723</b>	<b>1,144,024</b>	<b>23,649,056</b>	<b>7,468,676</b>	<b>7,613,568</b>



**103.—Quantity and Value of the World's Production of Gold and Silver for the Calendar Years 1919 and 1920.—concluded.**

Countries.	1919.				1920.			
	Gold.		Silver.		Gold.		Silver.	
	fine oz.	\$	fine oz.	\$	fine oz.	\$	fine oz.	\$
Asia—								
British India....	507,260	10,485,992	2,165,606	2,427,362	436,719	9,027,778	2,870,595	2,926,285
China.....	159,637	3,300,000	65,000	72,857	145,125	3,000,000	70,000	71,558
Chosen (Korea)....	135,450	2,800,000	20,000	22,417	145,125	3,000,000	25,000	25,485
East Indies—								
British.....	31,444	650,000	—	—	29,025	600,000	—	—
Netherlands.....	92,592	1,914,043	1,006,842	1,128,539	90,922	1,879,525	1,027,956	1,047,898
Federated Malay States.....	16,402	339,059	—	—	12,853	265,695	—	—
Indo-China.....	1,835	40,880	1,000	1,121	1,935	40,000	1,000	1,019
Japan.....	233,405	4,824,908	4,950,468	5,548,831	266,934	5,518,015	5,212,366	5,313,486
Sarawak.....	21,573	445,953	6,269	7,027	16,353	338,046	5,179	5,279
Taiwan (Formosa).....	20,186	417,282	25,000	28,022	20,186	417,282	25,000	25,485
<b>Total.....</b>	<b>1,219,784</b>	<b>25,218,117</b>	<b>8,240,185</b>	<b>9,236,176</b>	<b>1,165,177</b>	<b>24,086,341</b>	<b>9,237,096</b>	<b>9,416,295</b>
Africa—								
Algeria.....	—	—	170,813	191,459	—	—	150,000	152,910
Belgian Congo....	108,442	2,241,695	10,000	11,209	96,804	2,001,113	10,674	10,881
British West Africa—								
Gold Coast, Ashanti and Nigeria.....	225,226	6,102,862	—	—	230,948	4,336,771	—	—
Egypt and Abyssinia....	19,232	294,195	304	340	14,232	294,195	304	310
Eritrea.....	579	11,969	—	—	579	11,969	—	—
French West Africa, Guinea and Ivory Coast....	3,990	82,481	—	—	3,990	82,478	—	—
Madagascar.....	22,505	465,220	17,682	19,819	22,505	465,220	17,682	18,025
Portuguese East Africa....	9,675	200,000	1,000	1,121	8,708	180,000	1,000	1,019
Rhodesia—								
Northern.....	224	4,630	8,591	9,629	569	11,762	5,883	5,997
Southern.....	593,222	12,262,984	172,000	192,790	552,498	11,421,128	158,982	162,066
Transvaal.....	—	—	—	—	—	—	—	—
Cape Colony.....	8,331,651	172,230,473	891,304	999,036	8,158,455	168,648,178	892,593	909,909
Natal.....	—	—	—	—	—	—	—	—
<b>Total.....</b>	<b>9,314,746</b>	<b>193,896,509</b>	<b>1,271,694</b>	<b>1,425,403</b>	<b>9,089,288</b>	<b>187,452,814</b>	<b>1,237,118</b>	<b>1,261,117</b>
<b>Total for the World.....</b>	<b>17,629,937</b>	<b>365,789,684</b>	<b>176,459,648</b>	<b>197,633,675</b>	<b>16,203,123</b>	<b>334,808,866</b>	<b>174,749,702</b>	<b>178,001,005</b>

**104.—Imports into Canada of Portland Cement, 1898-1922.**

Fiscal Year.	Quantity.	Value.	Duty paid.	Fiscal Year.	Quantity.	Value.	Duty paid.
	Cwt.	\$	\$		Cwt.	\$	\$
1898.....	1,073,058	355,264	121,969	1910.....	490,809	158,487	47,984
1899.....	1,300,424	467,994	147,146	1911.....	1,283,721	494,081	138,969
1900.....	1,301,361	498,607	147,067	1912.....	2,592,025	936,425	292,914
1901.....	1,612,432	654,595	179,550	1913.....	4,958,814	1,955,177	597,727
1902.....	1,971,616	833,657	233,754	1914.....	709,104	332,564	69,658
1903.....	2,316,853	868,131	271,004	1915.....	287,402	123,613	26,034
1904.....	2,476,388	995,017	290,778	1916.....	94,136	37,048	9,382
1905.....	3,228,394	1,234,649	384,866	1917.....	63,074	29,719	6,307
1906.....	2,848,582	963,839	328,342	1918.....	26,243	17,417	2,624
1907.....	1,551,493	523,120	162,250	1919.....	26,687	26,437	2,667
1908.....	2,427,381	852,041	259,549	1920.....	45,458	47,156	3,720
1909.....	1,460,850	475,676	159,077	1921.....	132,187	153,513	10,502
				1922.....	24,952	34,304	1,920

<sup>1</sup>Nine months.

**105.—Imports into Canada of Anthracite and Bituminous Coal for home consumption during the fiscal years 1901-1922.**

Fiscal Year.	Anthracite, Free of Duty.		Bituminous Coal, Dutiable.	
	Tons.	\$	Tons.	\$
1901.....	1,933,283	7,923,950	2,516,392	4,956,025
1902.....	1,652,451	7,021,939	3,047,392	5,712,058
1903.....	1,456,713	7,028,664	3,511,421	7,776,717
1904.....	2,275,018	10,461,223	4,053,900	9,108,208
1905.....	2,604,137	12,093,371	4,176,274	8,022,896
1906.....	2,200,863	10,304,303	4,495,550	8,360,349
1907 <sup>1</sup> .....	2,014,846	9,487,574	3,807,604	7,491,045
1908.....	3,091,159	14,199,609	7,640,121	14,843,789
1909.....	3,059,663	14,034,020	6,763,352	13,151,449
1910.....	3,152,851	14,456,315	7,017,271	13,070,343
1911.....	3,465,774	15,750,340	7,745,571	14,597,268
1912.....	4,118,379	19,306,639	10,500,662	20,333,268
1913.....	4,237,310	20,399,279	11,060,910	20,447,587
1914.....	4,385,799	20,734,126	13,754,244	26,140,676
1915.....	4,383,497	20,927,539	9,124,499	16,135,920
1916.....	4,429,143	20,460,571	9,631,101	10,219,206
1917.....	4,572,440	22,806,156	12,931,075	19,270,270
1918.....	5,256,294	28,047,226	16,400,000	46,277,715
1919.....	4,752,788	26,191,798	16,569,025	44,411,207
1920.....	5,090,767	32,647,759	12,552,910	27,424,870
1921.....	4,839,559	39,058,148	15,407,996	72,239,952
1922.....	4,416,255	39,000,610	12,752,059	39,258,115

NOTE.—Anthracite coal dust is included under anthracite coal. For records of previous years, see Year Book, 1911, page 420. <sup>1</sup>Nine months.

**106.—Exports of Coal, the produce of Canada, 1903-1922.**

Fiscal Year.	Quantity.	Value.	Fiscal Year.	Quantity.	Value.
1903.....	Tons. 1,797,951	\$ 5,542,434	1913.....	Tons. 2,055,993	\$ 5,555,099
1904.....	1,646,505	4,346,660	1914.....	1,498,820	3,703,765
1905.....	1,615,322	3,930,802	1915.....	1,512,487	4,466,258
1906.....	1,820,411	4,643,198	1916.....	1,971,124	6,032,764
1907 (9 mos.).....	1,285,346	3,346,402	1917.....	1,899,185	6,817,035
1908.....	1,877,258	4,810,284	1918.....	1,902,010	8,684,038
1909.....	1,613,892	4,505,221	1919.....	1,826,639	10,169,722
1910.....	1,826,339	5,013,221	1920.....	2,120,138	13,183,666
1911.....	2,315,171	6,014,095	1921.....	2,277,202	16,501,478
1912.....	1,494,756	4,338,128	1922.....	1,953,053	13,182,440

## 107.—Annual Consumption of Coal in Canada, 1886-1921.

Calendar Year.	Canadian.		Imported.		Total, tons.	Tons per capita.
	Short tons.	p.c.	Short tons.	p.c.		
1886.....	1,595,950	45.9	1,884,161	54.1	3,480,111	0.758
1887.....	1,848,365	45.7	2,192,260	54.3	4,040,625	0.871
1888.....	2,013,925	37.8	3,314,353	62.2	5,328,278	1.137
1889.....	1,992,988	44.4	2,490,931	55.6	4,483,919	0.946
1890.....	2,360,196	47.8	2,581,187	52.2	4,941,383	1.031
1891.....	2,606,490	46.7	2,980,222	53.3	5,586,712	1.153
1892.....	2,464,012	44.4	3,082,429	55.6	5,546,441	1.133
1893.....	2,823,187	47.6	3,110,462	52.4	5,933,649	1.198
1894.....	2,743,376	48.5	2,917,818	51.5	5,661,194	1.130
1895.....	2,467,109	45.7	2,933,752	54.3	5,400,861	1.066
1896.....	2,639,055	45.1	3,206,456	54.9	5,845,511	1.140
1897.....	2,799,977	47.3	3,124,485	52.7	5,924,462	1.143
1898.....	3,023,079	48.0	3,274,981	52.0	6,298,060	1.200
1899.....	3,631,882	47.0	4,092,361	53.0	7,724,243	1.454
1900.....	3,989,542	47.8	4,361,563	52.2	8,351,105	1.561
1901.....	4,912,664	50.5	4,810,213	49.5	9,722,877	1.810
1902.....	5,376,413	51.0	5,165,938	49.0	10,542,351	1.927
1903.....	6,005,735	52.2	5,491,870	47.8	11,507,605	2.055
1904.....	6,697,183	49.2	6,909,651	50.8	13,606,834	2.346
1905.....	7,032,661	48.9	7,343,880	51.1	14,316,541	2.362
1906.....	7,927,560	51.7	7,398,906	48.3	15,326,466	2.425
1907.....	8,617,352	45.0	10,549,503	55.0	19,166,855	2.947
1908.....	9,156,478	47.3	10,195,424	52.7	19,351,902	2.820
1909.....	8,913,376	47.9	9,711,826	52.1	18,625,202	2.682
1910.....	10,532,103	50.2	10,438,123	49.8	20,970,226	2.960
1911.....	9,822,749	40.5	14,424,949	59.5	24,247,698	3.365
1912.....	12,385,696	46.0	14,549,104	54.0	26,934,800	3.657
1913.....	13,450,158	42.6	18,132,387	57.4	31,582,545	4.196
1914.....	12,214,403	45.5	14,637,920	54.5	26,852,323	3.490
1915.....	11,500,480	48.1	12,406,212	51.9	23,906,692	3.041
1916.....	12,348,036	41.3	17,517,820	58.7	29,865,856	3.717
1917.....	12,313,603	37.2	20,810,132	62.8	33,123,735	4.049
1918.....	13,160,731	37.8	21,611,101	62.2	34,771,832	4.175
1919.....	11,849,046	41.1	16,982,773	58.9	28,831,819	3.401
1920.....	14,388,541	40.9	20,815,596	59.1	35,204,137	4.079
1921.....	13,070,217	41.9	18,103,620	58.1	31,173,837	3.547

## 108.—Coal made available for Consumption in Canada, by Provinces, Calendar Year 1920. (Short tons).

Province.	Canadian Coal				Imported from the United States.	Coal available for con- sumption.
	Output.	Received from other Provinces.	Shipped to other Provinces.	Exported.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<b>Prince Edward Island—</b>						
Anthracite.....	—	—	—	—	5,544	5,544
Bituminous.....	—	120,670	—	2	513	121,181
<b>Total.....</b>	—	<b>120,670</b>	—	<b>2</b>	<b>6,057</b>	<b>126,725</b>
<b>Nova Scotia—</b>						
Anthracite.....	—	—	—	—	45,334	45,334
Bituminous.....	6,437,156	664	1,421,102	1,245,673	3,044	3,774,089
<b>Total.....</b>	<b>6,437,156</b>	<b>664</b>	<b>1,421,102</b>	<b>1,245,673</b>	<b>48,378</b>	<b>3,819,423</b>
<b>New Brunswick—</b>						
Anthracite.....	—	—	—	—	57,859	57,859
Bituminous.....	171,610	1,045,771	38,911	113,050	936	1,066,356
<b>Total.....</b>	<b>171,610</b>	<b>1,045,771</b>	<b>38,911</b>	<b>113,050</b>	<b>58,795</b>	<b>1,124,215</b>

**108.—Coal made available for Consumption in Canada, by Provinces, Calendar Year 1920.—concluded. (Short tons.)**

Province.	Canadian Coal.				Imported from the United States.	Coal available for consumption.
	Output.	Received from other Provinces.	Shipped to other Provinces.	Exported.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<b>Quebec—</b>						
Anthracite.....	—	—	—	—	1,544,456	1,544,456
Bituminous.....	—	280,880	—	1,372	3,503,410	3,782,918
<b>Total.....</b>	<b>—</b>	<b>280,880</b>	<b>—</b>	<b>1,372</b>	<b>5,047,866</b>	<b>5,327,374</b>
<b>Ontario, Central—</b>						
Anthracite.....	—	—	—	—	2,945,782	2,945,782
Bituminous.....	—	12,028	—	—	10,373,324	10,385,352
<b>Total.....</b>	<b>—</b>	<b>12,028</b>	<b>—</b>	<b>—</b>	<b>13,319,106</b>	<b>13,331,134</b>
<b>Head of Lakes—</b>						
Anthracite.....	—	—	—	—	295,682	295,682
Bituminous.....	—	629	—	—	1,963,579	1,964,208
Lignite.....	—	14,271	—	—	—	14,271
<b>Total.....</b>	<b>—</b>	<b>14,900</b>	<b>—</b>	<b>—</b>	<b>2,259,261</b>	<b>2,274,161</b>
<b>Manitoba—</b>						
Anthracite.....	—	1,356	—	—	17,509	18,865
Bituminous.....	—	259,066	—	721	43,547	301,892
Lignite.....	—	604,465	—	—	—	604,465
<b>Total.....</b>	<b>—</b>	<b>864,887</b>	<b>—</b>	<b>721</b>	<b>61,056</b>	<b>925,222</b>
<b>Manitoba and Head of Lakes<sup>1</sup>—</b>						
Anthracite.....	—	1,356	—	—	313,191	314,547
Bituminous.....	—	259,695	—	721	2,007,126	2,266,100
Lignite.....	—	618,736	—	—	—	618,736
<b>Total.....</b>	<b>—</b>	<b>879,787</b>	<b>—</b>	<b>721</b>	<b>2,320,317</b>	<b>3,199,383</b>
<b>Saskatchewan—</b>						
Anthracite.....	—	4,657	—	—	206	4,863
Bituminous.....	—	176,618	—	3,132	335	174,021
Lignite.....	335,222	1,138,600	151,018	—	—	1,322,804
<b>Total.....</b>	<b>335,222</b>	<b>1,319,875</b>	<b>151,018</b>	<b>3,132</b>	<b>741</b>	<b>1,501,688</b>
<b>Alberta—</b>						
Anthracite.....	127,513	—	11,072	—	517	116,958
Bituminous.....	3,419,147	9,278	366,568	3,106	607	3,059,368
Lignite.....	3,361,105	599	1,658,895	—	—	1,702,809
<b>Total.....</b>	<b>6,907,765</b>	<b>9,877</b>	<b>2,036,535</b>	<b>3,106</b>	<b>1,124</b>	<b>4,879,125</b>
<b>British Columbia and Yukon—</b>						
Anthracite.....	—	5,059	—	—	75	5,134
Bituminous.....	3,095,011	69,225	148,248	1,191,167	13,137	1,837,958
Lignite.....	—	51,978	—	—	—	51,978
<b>Total.....</b>	<b>3,095,011</b>	<b>126,262</b>	<b>148,248</b>	<b>1,191,167</b>	<b>13,212</b>	<b>1,895,070</b>
<b>Canada—</b>						
Anthracite.....	127,513	—	—	—	4,912,964	5,040,477
Bituminous.....	13,122,924	—	—	2,558,223	15,902,632	26,467,333
Lignite.....	3,696,327	—	—	—	—	3,696,327
<b>Total.....</b>	<b>16,946,764</b>	<b>—</b>	<b>—</b>	<b>2,558,223</b>	<b>20,815,596</b>	<b>35,204,137</b>

<sup>1</sup>These figures are the sum of those given under the two previous headings.



## MANUFACTURES.

Manufacture is defined as the operation of making wares from raw materials, by the hands, by art or by machinery, thus adding, in the phraseology of the economist, new utilities and therefore additional value, to the already existing utilities and values of the raw material. Manufacture, in primitive societies and in the pioneer stages of new communities, is normally carried on within the household for the needs of the household, as was the case among the early settlers of Canada in the seventeenth and eighteenth centuries. At a later period in the evolution of society, manufactures are carried on in specialized workshops for the needs of the immediate locality or neighbourhood, as was generally the case in Eastern Canada in the first half of the nineteenth century. Later still, as a consequence of the introduction of machinery operated by steam or electric power—the so-called “Industrial Revolution”—and of the cheapening of transportation, manufacture has to an increasing extent been concentrated in factories, often employing hundreds and even thousands of persons and producing for a national or even for an international market. So far as Canada is concerned, this “industrial revolution” may be said to have commenced shortly before Confederation and to be still in progress. The growth of manufacturing production since 1870 is outlined in this article and the accompanying Table 109, while the increasing importance of manufacturing for the international market may be illustrated by reference to the statistics of Table 7 of the Trade and Commerce section of the 1920 Year Book, which shows that Canadian exports of manufactured produce increased from less than \$3,000,000 per annum on the average of 1871-1875 to \$435,000,000 in the post-war fiscal year ended March 31, 1920.

The kind of manufactures to be established in a community will in the beginning be largely determined, more especially where transportation charges are high, by the type of raw materials available in that community. For example, probably the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada, was the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first manufacturing processes were the construction of a mill equipped with a water wheel and the grinding of the grain into flour in the autumn of the same year. Other earlier manufactures were also necessarily connected with the satisfaction of the primary needs of human beings for food, clothing and shelter, and with the other primary need for protection. At a census of occupations taken in 1681, we find a comparatively large number of tailors and shoemakers, masons and carpenters, gunsmiths and edge-tool makers, enumerated.

The earlier manufactures were necessarily of a rather crude and primitive type, concerned with the preparation of commodities which were too bulky to bear the heavy transportation charges of those days, when only one round trip per annum could be made between France and Quebec, and vessels were constantly subject to the storms of the North Atlantic and very frequently to the attacks

of the English. Indeed, although the colonial policy of France under the old *régime* aimed at preventing the manufacture in Canada of any article which could be imported from the mother country, the uncertainties of transportation due to the colonial wars of the period—France and England were at war for 34 years out of the 74 years between 1689 and 1763—led to a necessary relaxation of restrictions. On the occasion of the English capture of a convoy in 1705, the colonists were driven to manufacture rough cloth out of whatever fibres they could obtain, such as the Canadian nettle and the inner bark of the basswood. Such events led to the introduction of sheep-raising and the growth of the domestic manufacture of homespun woollens. The number of sheep in the colony increased from 1,820 in 1706 to 12,175 in 1720, 28,022 in 1765, 84,696 in 1784 and 829,122 in Lower Canada alone in 1827. This increase in sheep approximately measures the growth of the manufacture of homespun woollens.

In the days when ships were built of wood, a country where wood was so plentiful as in Canada possessed the raw materials for production. Pont-Gravé built two small vessels at Port Royal in 1606 and one at Tadoussac in 1608. Talon in 1666 built on his private account a ship of 120 tons, and in 1672 a vessel of 400 to 500 tons was on the stocks at Quebec. Ships were built for the French navy and for the West India trade. Under the British *régime* shipbuilding was conducted on a large scale in Quebec and New Brunswick, the industry reaching its climax of prosperity about 1865, when 105 Quebec-built ships with a tonnage of 59,333 tons were placed on the register. Thereafter iron and steel ships gradually supplanted the wooden vessels. The forests of Canada have since provided the raw material for the great pulp and paper industry.

The development of mines has been of comparatively recent date. Iron deposits in the St. Maurice regions were worked as early as 1733 and furnaces set up there for smelting in 1737 were in fairly constant operation until 1883. The iron and steel used in manufacturing in Canada, as well as the coal which has supplied the manufacturing industries with power, have in the main been imported from the United States, chiefly because the principal manufacturing centres of the country in the St. Lawrence and Great Lakes region were fairly conveniently situated with regard to the coal and iron supplies of the United States, and far away from the coal and iron supplies of the Maritime Provinces. In recent years the shortage of coal is made up for by the increasing use of electric power, but the great bulk of the pig-iron used in Canadian manufactures is still imported.

During the first half of the nineteenth century, the manufactures carried on in Canada were mainly domestic—carried on in the household or in small adjoining buildings. In 1827, according to census records, there were in Lower Canada 13,243 spinning-wheels, and 1,153,673 French ells of home-made cloth, 808,240 French ells of home-made flannel, and 1,058,696 French ells of home-made linen were produced. In 1842 Upper Canada produced 433,527 yards of

home-made cloth, 166,881 yards of home-made linen and 727,286 yards of home-made flannel, and in 1848, 624,971 yards of fulled cloth, 71,715 yards linen and 1,298,172 yards flannel. Nova Scotia in 1851 produced 119,698 yards fulled cloth, 790,104 yards non-fulled cloth, and 219,352 yards flannel. Such production of homespun goods did not materially interfere with the market for the more elaborate factory-made goods imported from the United Kingdom, but supplied the numerous daughters in the large families of the pioneers with useful work in their own homes.

The factory system of production, because of the great economies in production made possible by the division of labour and the use of mechanical power, was to come into vogue in Canada as well as in the mother country and the United States. In 1858 and 1859, the Government of the then province of Canada adopted the policy of granting "incidental protection" to the growing industries of the province, and denied the right of the colonial secretary to disallow the tariff legislation of these years in deference to the protests of British manufacturers. From that time to the present there has been an element of protection in the Canadian tariff, though at Confederation the tariff was lowered to meet the wishes of the Maritime Provinces, which were commercial rather than manufacturing communities.

The first post-Confederation census of Canadian manufacturing production was taken in 1871, as for the previous year, and the summary statistics of this and subsequent censuses are given in Table 109, which shows a striking increase in manufactures during the period of nearly half a century which the statistics cover. Owing to the increase in prices and the emergency production of munitions this growth has been particularly great in recent years, while the increased use of hydro-electric power in the coal-less industrialized districts of Ontario and Quebec has been another great factor in recent industrial development.

In the present as in the past, Canadian manufacturing production has been chiefly dependent upon the use of Canadian raw material, though this has recently been less true than formerly. Raw cotton, for example, is imported from the Southern States, hides from the Argentine, rubber from the Straits Settlements and Malay Peninsula, sugar from Cuba and the British West Indies, and wool from Australia and New Zealand, to supply the raw material for Canadian manufacturing industries. Nevertheless, as stated by Prof. Mavor of Toronto in the Oxford Survey of the British Empire, the most important industrial activities in the Eastern industrial region, are as of old necessarily devoted to the exploitation of the raw materials with which the region abounds and to the manufacture of these. The forest industries take a prominent place, including the preparation of timber for construction purposes; the manufacture of doors and windows; of matches, of wood pulp and paper. Naturally also, the manufacture of food products is an industry of the greatest importance in a food-producing country, and the manufacture of agricultural machinery is also an important branch of



industry. During the period of development since the commencement of the present century, the manufacture of such materials of construction as iron, steel and cement has come to be of the greatest importance.

**Growth of Large-Scale Production.**—The growth of large-scale production in manufactures during the past fifty years is evident from the statistics of Table 109, though this tendency has been less marked in Canada than in more highly developed industrial communities, with larger populations able to absorb a larger amount of standardized commodities. Even so, in the electoral district of South Toronto, the most important manufacturing centre of Ontario, the census of 1911 showed that one-half of the industrial establishments employed 90 p.c. of the workers. In the period immediately preceding the Great War many consolidations of previously independent manufacturing plants were effected, involving large economies in the purchase of materials and in selling expenses.

The historical Table 109 shows fairly well the advance of the Industrial Revolution (which might better be called Evolution) in Canada. The average capital per manufacturing establishment, the average number of employees per establishments, the average value of products per establishment, have been fairly continuously on the increase. If the consolidation of industry lessens the chances of an employee becoming a master, it must also be remembered that the amounts paid to employees in salaries and wages have also increased, so that the position of the average employee has been greatly ameliorated, though the lack of statistics on Canadian prices before 1890 prevents us from accurately comparing the purchasing power of the average wages of the worker in 1870 and of the employee of 1919.

The comparability of the statistics of the various censuses is seriously affected by the different methods employed in taking the census. In the censuses of 1870, 1880 and 1890, all manufacturing establishments were included, the instructions to enumerators running as follows:—"An industrial establishment is a place where one or several persons are employed in manufacturing, altering, making up or changing from one shape into another, materials for sale, use or consumption, quite irrespectively of the amount of capital employed or of the products turned out. All repairs, mending or custom work are understood to be industrial products and are to be entered accordingly, by value, in the returns of industrial establishments".

In the statistics for 1900, 1905, and 1910, however, only establishments employing five hands and upwards were included. The 1901 instructions are that no manufacturing establishment or factory will be so recognized for census purposes which does not employ at least five persons, either in the establishment itself or employed out of it. This, however, did not apply to mines, factories nor to certain mineral products. The instructions stated that every factory in operation during



1910, and employing five or more persons, was to make a full report. All flour mills, saw and shingle mills, lime kilns, brick and tile works, butter and cheese factories, fish curing plants, electric light and power plants whatsoever were nevertheless to be included. The statistics for 1915 included only establishments having an output of \$2,500 or over, irrespective of the number of persons employed, except in the case of flour and grist mills, butter and cheese factories, fish preserving factories, saw-mills, brick and tile yards, lime kilns and electric light plants, where all plants were included.

In the census of industry of 1917, the limit of output was withdrawn and all establishments reporting to the Bureau were included, the effect being an increase in the number of establishments included from 21,306 in 1915 to 34,392 in 1917—an increase due mainly to change of method, rather than to a change in the actual number of industrial establishments existing in the Dominion. Similar methods have been pursued in the censuses of 1918 and 1919, so that the results for the three years are strictly comparable, a fact which has been the guiding principle in framing the tables included in this part of the Year Book. As the establishments included for the first time in the 1917 census were those which carried on business only on a small scale, their inclusion affected only to a minor extent the statistics of those engaged in production and of the value of products.

**Recent Censuses of Manufactures.**—The census of manufactures has since 1917 been taken by the Dominion Bureau of Statistics annually instead of quinquennially. The last of the quinquennial censuses was taken in 1916 for the calendar year 1915, and the first annual censuses were taken in 1918, 1919 and 1920 for the calendar years 1917, 1918 and 1919.

In any comparison between the results of the 1915 quinquennial census and the subsequent annual censuses the rapid rise in prices must be borne in mind, and in comparisons between these annual censuses themselves the same factor must be taken into account. The Canadian index number of wholesale prices was 293.2 for 1919 as compared with 278.3 for 1918, 237.0 for 1917 and 148.0 in 1915. Under such circumstances it was inevitable that considerable increases in the money value of products should have been recorded, and that wages and salaries paid should also have greatly advanced since 1915.

Summary statistics of manufactures for 1917, 1918 and 1919, are contained in Table 111, significant features of which are the increase in capital, salaries, wages, and value of products during the period. More detailed statistics by groups of industries are given in Table 112, which shows among other things, an extraordinary decline in the value of iron and steel products and of chemical products in 1919 as compared with 1918, accounted for by the transition from war to peace. This was observable both in the cost of raw materials and in the value of finished products, while the comparative stagnation in the iron and steel industry was also reflected in a decline in the number of establishments in the iron and steel industry, for example,

falling from 69,466 in 1918 to 56,442 in 1919, and in the chemical industry from 16,541 to 12,216. The miscellaneous industries group also declined greatly in value of products and in number of employees owing to the cessation of the manufacture of ammunition, which fell in gross value of product from \$186,034,920 in 1918 to \$3,709,428, and in number of wage-earners from 35,046 to 1,321.

On the whole, it may be stated that 1919, partly owing to the higher prices, was a very prosperous year for Canadian manufactures outside of the munitions and war supplies industries.

Statistics of number of establishments, capital, cost of materials, and value of products, are given for some 300 different industries for the years 1917, 1918, 1919, in Table **112**, and statistics of the number of salary-earning and wage-earning employees and of salaries and wages paid in these same industries are given in Table **113**. Among the chief of these individual industries are the butter and cheese industry, the flour and grist mill industry, the slaughtering and meat packing industry, the refined sugar industry and the log products industry, each of which turned out in 1919 gross products exceeding \$100,000,000 in value. Industries having a gross product of between \$50,000,000 and \$100,000,000 in 1919 were biscuit and confectionery, bread and other bakery products, cottons, foundry and machine shop products, rolling mills and steel furnaces, boots and shoes, smelting, wood pulp and paper. For details regarding capitalization, products, number of employees and wages paid in these and other industries, the reader is referred to the tables.

The growth and prosperity of most of the cities and large towns of Canada is intimately connected with the condition of their manufacturing industries. Statistics of the manufacturing industries in all cities and towns of over 5,000 population throughout the country, as ascertained at the censuses of 1917, 1918 and 1919, are given in Table **114**. As a consequence of the return to peace time conditions, the figures for 1919 are in many cases strikingly reduced from those of 1918, as in the cases of Sydney and Sault Ste. Marie. Cities having a gross manufacturing production of over \$100,000,000 each in 1919, in the order of the value of their products, were Montreal, Toronto, Hamilton, Winnipeg. Vancouver, the only city in the \$50,000,000 to \$100,000,000 class in 1919, produced manufactures to the gross value of \$88,104,138. Other important manufacturing cities producing in 1919 goods to a gross value of between \$30,000,000 and \$50,000,000 were, in the order of value produced, London, St. John, N.B., Ottawa, Kitchener, Sydney, Brantford, Oshawa, Calgary, Quebec, Edmonton and Peterborough. For details the reader is referred to Table **114**.

Summary statistics of the number of salaried and wage-earning employees of manufacturing industries, with the amount of salaries and wages paid in 1919, are given in Table **115**. Information collected at this census regarding weekly wages of employees in manufacturing industries, is tabulated by groups of industries and by wage groups in the Wages subsection of the Labour, Wages and Prices section of the Year Book, and to this the student of industrial wages is referred.

**109.—Historical Summary of Statistics of Manufactures, by Provinces, 1870 to 1919.**  
(All establishments irrespective of the number of employees.)

Provinces.	Estab-lish-ments.	Capital.	Em-ployees	Salaries and wages.	Cost of materials.	Net Value of products.	Gross Value of products.
1870.	No.	\$	No.	\$	\$	\$	\$.
<b>Canada</b> .....	<b>41,259</b>	<b>77,964,020</b>	<b>187,942</b>	<b>40,851,009</b>	<b>124,907,846</b>	<b>96,709,927</b>	<b>221,617,773</b>
Nova Scotia.....	4,912	7,041,906	15,595	3,176,266	5,806,257	6,531,848	12,338,105
New Brunswick.....	3,479	5,976,176	18,352	3,869,360	9,431,760	7,935,927	17,367,687
Quebec.....	13,818	28,071,868	66,714	12,339,673	44,555,025	32,650,157	77,205,182
Ontario.....	19,050	37,874,010	87,281	21,415,710	65,114,804	49,591,995	114,706,799
1880.							
<b>Canada</b> .....	<b>49,722</b>	<b>165,302,623</b>	<b>254,935</b>	<b>59,429,002</b>	<b>179,918,593</b>	<b>129,757,175</b>	<b>309,676,068</b>
P.E. Island.....	1,617	2,085,776	5,767	807,208	1,829,210	1,570,998	3,400,208
Nova Scotia.....	5,493	10,183,060	20,390	4,098,445	10,022,030	8,553,296	18,575,326
New Brunswick.....	3,005	5,425,282	19,922	3,866,011	11,060,842	7,451,816	18,512,658
Quebec.....	15,754	59,216,992	85,673	18,333,162	62,563,967	42,098,291	104,662,258
Ontario.....	23,070	80,950,847	118,308	30,604,031	91,164,156	66,825,714	157,989,870
Manitoba.....	334	1,383,331	1,921	755,507	1,924,821	1,488,205	3,413,026
British Columbia.....	415	2,952,835	2,871	929,213	1,273,816	1,652,968	2,926,784
The Territories.....	24	104,500	83	35,425	79,751	116,187	195,938
1890.							
<b>Canada</b> .....	<b>75,961</b>	<b>353,213,009</b>	<b>369,595</b>	<b>109,415,350</b>	<b>250,759,292</b>	<b>219,088,591</b>	<b>469,817,886</b>
P.E. Island.....	2,679	2,911,963	7,910	1,101,620	2,092,067	2,253,843	4,345,910
Nova Scotia.....	10,495	19,730,736	34,944	7,233,111	16,062,479	14,905,913	30,968,392
New Brunswick.....	5,129	15,821,555	26,675	5,970,914	12,501,453	11,348,292	23,549,055
Quebec.....	23,034	116,974,615	116,753	30,461,315	80,712,966	66,747,087	147,459,583
Ontario.....	32,151	175,972,021	166,322	49,730,359	127,737,371	111,504,555	239,241,926
Manitoba.....	1,031	5,684,237	4,403	1,905,981	5,688,151	4,467,031	10,155,182
British Columbia.....	770	14,404,334	11,507	3,586,897	5,119,258	6,880,670	11,999,928
The Territories.....	375	1,713,179	1,081	425,153	846,017	981,293	1,827,310

(Establishments with five hands and over.)

1890.							
<b>Canada</b> .....	<b>14,665</b>	<b>-</b>	<b>272,033</b>	<b>79,234,311</b>	<b>-</b>	<b>368,696,723</b>	<b>-</b>
1900.							
<b>Canada</b> .....	<b>14,650</b>	<b>446,918,187</b>	<b>339,173</b>	<b>113,319,350</b>	<b>266,527,858</b>	<b>214,525,517</b>	<b>481,933,375</b>
P.E. Island.....	334	2,081,766	3,804	445,998	1,319,058	1,007,650	2,326,708
Nova Scotia.....	1,188	34,586,416	23,284	5,613,571	13,161,077	10,431,436	23,592,513
New Brunswick.....	919	20,741,170	22,158	5,748,990	10,814,014	10,158,456	20,972,470
Quebec.....	4,845	142,403,407	110,329	36,550,655	86,679,779	71,608,215	158,287,994
Ontario.....	6,543	214,972,275	161,757	56,548,286	138,230,400	103,303,086	241,533,486
Manitoba.....	324	7,539,691	5,219	2,419,549	7,955,504	4,971,935	12,927,439
Alberta and Saskatchewan.....	105	1,680,870	1,168	465,763	1,121,342	843,645	1,964,987
British Columbia.....	392	22,901,892	11,454	5,456,338	7,246,684	12,201,034	19,447,778
1905.							
<b>Canada</b> .....	<b>12,547</b>	<b>833,916,155</b>	<b>383,920</b>	<b>162,155,573</b>	<b>-</b>	<b>-</b>	<b>706,446,578</b>
P.E. Island.....	223	1,553,916	2,770	409,915	-	-	1,696,459
Nova Scotia.....	720	74,599,538	23,754	9,139,371	-	-	31,987,449
New Brunswick.....	531	26,461,664	19,170	6,497,161	-	-	21,833,564
Quebec.....	4,115	251,730,182	116,748	45,514,619	-	-	216,478,496
Ontario.....	6,163	390,875,465	184,526	80,729,889	-	-	361,372,741
Manitoba.....	280	27,070,665	10,113	5,800,707	-	-	27,857,396
Saskatchewan.....	55	3,820,975	1,376	681,381	-	-	2,443,801
Alberta.....	97	5,400,371	1,983	1,129,272	-	-	4,979,932
British Columbia.....	363	52,403,379	23,480	11,253,263	-	-	37,796,740
1910.							
<b>Canada</b> .....	<b>19,218</b>	<b>1,247,583,609</b>	<b>515,203</b>	<b>241,008,416</b>	<b>601,509,018</b>	<b>564,466,621</b>	<b>1,165,975,639</b>
P.E. Island.....	442	2,013,365	3,762	531,017	1,816,804	1,319,666	3,136,470
Nova Scotia.....	1,450	79,596,341	28,795	10,628,095	26,058,315	26,647,869	52,706,184
New Brunswick.....	1,158	36,125,012	24,755	8,314,212	18,516,096	16,906,206	35,422,302
Quebec.....	6,584	326,949,925	158,207	69,432,967	184,374,053	166,527,602	350,901,656
Ontario.....	8,001	595,304,608	238,817	117,645,784	297,580,125	282,230,100	579,810,225
Manitoba.....	439	47,941,540	17,325	10,912,866	30,499,829	23,173,780	53,673,609
Saskatchewan.....	173	7,019,951	3,250	1,936,284	2,747,266	3,584,866	6,332,132
Alberta.....	290	29,518,346	6,980	4,365,661	9,998,777	8,790,048	18,788,825
British Columbia.....	651	123,027,521	33,312	17,240,670	29,917,753	35,286,483	65,204,236
1915.							
<b>Canada</b> .....	<b>15,593</b>	<b>1,958,705,230</b>	<b>-</b>	<b>283,311,505</b>	<b>791,943,433</b>	<b>589,603,792</b>	<b>1,381,547,223</b>
P.E. Island.....	261	1,841,690	-	543,954	1,499,066	1,087,757	2,586,823
Nova Scotia.....	781	125,754,562	-	17,175,818	36,194,004	33,151,815	69,345,819
New Brunswick.....	630	45,970,488	-	8,767,230	21,314,643	15,989,257	37,303,900
Quebec.....	5,743	530,312,464	-	80,324,171	213,754,115	167,449,884	381,203,999
Ontario.....	6,538	946,619,114	-	140,609,691	410,670,537	304,861,302	715,531,839
Manitoba.....	499	40,690,750	-	13,389,569	38,529,386	21,952,060	60,481,446
Saskatchewan.....	238	14,736,860	-	2,440,062	7,417,166	5,938,040	13,355,206
Alberta.....	282	41,198,897	-	4,791,281	20,699,967	8,716,254	29,416,221
British Columbia.....	621	157,580,405	-	15,269,729	41,864,549	30,457,423	72,321,972

<sup>1</sup>These statistics are not available by Provinces.

NOTE.—For 1915 the number of employees in establishments employing 5 hands and over has not been compiled.



## 109.—Historical Summary of Statistics of Manufactures, by Provinces, 1870 to 1919.—concluded.

(All establishments irrespective of the number of employees.)

Provinces.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Net Value of products.	Gross Value of products.
1915.	No.	\$	No.	\$	\$	\$	\$
Canada.....	21,306	1,991,103,272	197,170	285,889,291	802,135,862	605,001,278	1,407,137,140
P.E. Island.....	291	1,906,564	2,334	554,467	1,520,327	1,126,142	2,646,469
Nova Scotia.....	968	126,539,183	33,581	16,316,712	37,738,161	33,122,595	70,860,756
New Brunswick.....	714	46,290,014	17,423	8,765,433	21,495,324	16,336,710	37,832,034
Quebec.....	7,158	548,972,575	148,329	80,217,258	216,497,844	171,402,741	387,900,585
Ontario.....	9,287	956,883,423	243,905	144,072,317	415,285,954	312,637,320	727,923,274
Manitoba.....	840	95,845,845	19,668	13,614,857	38,513,514	23,080,670	61,594,184
Saskatchewan.....	457	16,788,992	3,621	2,705,754	7,678,416	6,484,158	14,162,574
Alberta.....	584	42,239,693	7,255	5,074,742	21,121,439	9,471,394	30,592,833
British Columbia.....	1,007	158,636,983	21,054	14,567,751	42,284,883	31,339,548	73,624,431
1917.							
Canada.....	34,392	2,786,649,727	674,910	550,192,069	1,605,730,640	1,409,847,306	3,015,577,940
P.E. Island.....	534	2,652,374	1,923	837,230	3,402,485	2,115,425	5,517,910
Nova Scotia.....	2,147	136,621,655	31,393	23,553,090	109,736,731	66,632,294	176,369,025
New Brunswick.....	1,423	65,539,370	21,363	13,822,446	33,333,090	29,084,376	62,417,466
Quebec.....	10,042	823,317,251	211,018	158,134,925	403,422,445	427,191,584	830,614,029
Ontario.....	14,381	1,335,968,699	326,635	278,462,708	822,842,054	710,896,601	1,533,738,655
Manitoba.....	1,329	101,145,033	22,670	19,599,051	73,181,719	49,673,162	122,804,881
Saskatchewan.....	1,436	33,114,030	8,210	7,007,073	23,449,495	17,208,251	40,657,746
Alberta.....	1,317	63,215,444	11,524	10,387,379	43,896,941	27,772,432	71,669,423
British Columbia.....	1,772	221,436,100	40,098	38,269,366	92,489,277	78,936,339	171,425,616
Yukon.....	11	3,739,171	71	118,801	26,403	336,786	363,189
1918.							
Canada.....	35,797	3,034,301,915	678,337	629,799,644	1,900,252,314	1,557,781,561	3,458,036,975
P.E. Island.....	484	2,886,662	1,467	777,067	3,547,800	2,146,078	5,693,878
Nova Scotia.....	2,125	133,262,649	29,569	25,563,978	93,540,657	66,869,233	160,409,890
New Brunswick.....	1,364	74,470,879	19,888	14,247,388	34,513,640	33,819,429	68,333,069
Quebec.....	10,540	860,468,768	207,494	175,800,005	472,444,599	448,176,572	920,621,171
Ontario.....	15,365	1,508,011,435	333,972	320,740,214	1,008,824,704	800,242,297	1,809,067,001
Manitoba.....	1,444	105,983,159	23,887	23,389,683	92,600,183	52,431,327	145,031,510
Saskatchewan.....	1,422	39,476,260	8,066	8,496,172	30,614,183	19,395,452	50,009,635
Alberta.....	1,252	61,405,933	9,894	10,249,465	54,740,907	27,693,515	82,434,422
British Columbia.....	1,786	244,697,241	44,039	50,422,163	109,403,517	106,772,000	216,175,517
Yukon.....	15	3,638,929	61	104,509	22,124	238,758	260,882
1919.							
Canada.....	38,344	3,230,686,368	682,434	689,435,709	1,875,615,877	1,645,115,712	3,520,731,589
P.E. Island.....	539	2,867,035	1,605	973,300	4,269,843	2,599,741	6,869,584
Nova Scotia.....	2,249	131,914,231	28,105	24,557,105	74,928,099	65,196,996	140,125,095
New Brunswick.....	1,439	89,958,882	24,248	19,244,350	53,471,290	46,534,315	100,005,605
Quebec.....	11,061	936,712,125	205,561	189,732,521	517,596,980	470,987,843	988,574,823
Ontario.....	16,438	1,583,161,271	323,372	336,579,559	943,622,018	793,921,978	1,737,543,996
Manitoba.....	1,622	111,535,665	27,354	30,695,829	90,539,234	62,480,875	153,020,109
Saskatchewan.....	1,534	35,869,588	9,479	11,437,427	35,437,613	24,314,873	59,752,486
Alberta.....	1,379	66,673,667	12,997	15,186,068	55,796,219	39,059,540	94,855,759
British Columbia.....	2,064	268,419,281	49,671	60,964,272	99,944,539	139,850,449	239,794,988
Yukon.....	19	3,574,623	42	65,272	20,042	169,102	183,144

## 110.—Summary Statistics of Manufactures of Canada, 1917, 1918 and 1919.

(All establishments irrespective of the number of employees.)

Items.		1917	1918.	1919.	Increase p. c. 1918-19.
Establishments.....	No.	34,392	35,797	38,344	7.12
Capital.....	\$	2,786,649,727	3,034,301,915	3,230,686,368	6.47
Average capital per establishment.....	\$	81,026	84,764	84,229	-0.63
Employees on salaries.....	No.	73,605	75,221	88,316	17.41
Salaries.....	\$	94,992,246	107,503,074	130,855,002	21.72
Average salary.....	\$	1,291	1,429	1,482	3.71
Employees on wages.....	No.	601,305	603,116	594,118	-1.49
Wages.....	\$	455,199,823	522,287,570	558,580,707	6.95
Average wage.....	\$	757	866	940	8.54
Cost of materials.....	\$	1,605,730,640	1,900,252,314	1,875,615,877	-1.30
Value added in manufacture.....	\$	1,409,847,300	1,557,784,661	1,645,115,712	5.61
Value of products.....	\$	3,015,577,940	3,458,036,975	3,520,731,589	1.81
Average value products per establishment.....	\$	87,682	96,601	91,820	-4.95
Piece Workers <sup>1</sup> .....	No.	17,157	14,197	15,374	8.29
Earnings of piece workers.....	\$	3,109,606	3,520,544	3,401,663	-3.38

NOTE.—Minus (—) denotes decrease. <sup>1</sup>Not included in general statistics of number of employees or earnings.



## 111.—Summary Statistics of Manufactures, by Groups

Groups of Industries.	Establishments.			Capital.		
	1917.	1918.	1919.	1917.	1918.	1919.
	No.	No.	No.	\$	\$	\$
1. Food products.....	8,009	7,968	8,031	299,032,589	340,499,122	359,366,536
2. Textiles.....	4,112	4,191	4,366	203,308,587	237,724,097	265,819,050
3. Iron and steel products.....	1,049	1,064	1,135	307,407,980	339,483,020	349,929,834
4. Timber and lumber and re-manufactures.....	4,463	4,594	4,966	289,169,396	334,104,182	395,808,490
5. Leather and its finished products.....	1,249	1,672	2,057	76,315,861	76,652,767	88,272,360
6. Paper and printing.....	1,819	1,762	1,803	224,176,986	242,046,328	288,974,274
7. Liquors and beverages.....	433	391	405	48,178,985	47,973,751	45,236,675
8. Chemicals and allied products.....	333	337	312	117,903,392	134,377,823	138,133,759
9. Clay, glass and stone products.....	913	793	558	79,420,372	73,528,361	86,081,326
10. Metals and metal products other than steel.....	2,311	2,392	2,942	123,459,129	132,757,003	145,351,322
11. Tobacco and its manufactures.....	176	153	144	27,277,858	32,948,356	37,639,965
12. Vehicles for land and air transportation.....	970	893	897	219,766,079	179,799,539	122,883,658
13. Vehicles for water transportation.....	201	204	177	42,966,932	57,444,939	72,114,691
14. Miscellaneous industries.....	2,378	2,595	2,610	680,385,347	742,635,175	753,834,956
15. Hand trades.....	5,976	6,788	7,941	47,880,234	62,327,452	81,239,472
<b>Totals.....</b>	<b>34,392</b>	<b>35,797</b>	<b>38,344</b>	<b>2,786,649,727</b>	<b>3,034,301,915</b>	<b>3,230,686,368</b>

Groups of Industries.	Employees on Salaries.			Salaries Paid.		
	1917.	1918.	1919.	1917.	1918.	1919.
	No.	No.	No.	\$	\$	\$
1. Food products.....	9,684	12,036	13,864	10,823,434	14,420,250	17,681,234
2. Textiles.....	7,969	7,569	10,537	11,128,445	11,711,389	14,946,343
3. Iron and steel products.....	7,088	7,082	8,051	9,790,373	11,566,806	13,518,253
4. Timber and lumber and re-manufactures.....	6,823	6,593	8,608	9,689,696	9,835,274	12,734,049
5. Leather and its finished products.....	2,717	2,319	2,855	3,735,282	3,372,088	4,751,016
6. Paper and printing.....	7,236	7,797	9,547	9,393,948	11,041,001	14,844,110
7. Liquors and beverages.....	1,070	949	927	1,696,576	1,619,113	1,484,443
8. Chemical and allied products.....	2,881	2,850	2,815	4,003,162	4,524,669	4,803,087
9. Clay, glass and stone products.....	998	978	1,018	1,386,870	1,493,600	1,792,118
10. Metals and metal products other than steel.....	3,407	3,682	4,672	4,681,735	5,578,802	6,551,620
11. Tobacco and its manufactures.....	1,296	1,039	1,325	1,773,794	1,563,801	2,367,599
12. Vehicles for land and air transportation.....	5,737	3,573	4,088	6,351,749	5,247,893	6,679,565
13. Vehicles for water transportation.....	872	1,403	1,432	998,341	1,923,055	2,616,933
14. Miscellaneous industries.....	13,587	14,836	15,268	16,601,693	20,304,583	21,175,982
15. Hand trades.....	2,240	2,515	3,309	2,936,948	3,300,750	4,908,650
<b>Totals.....</b>	<b>73,605</b>	<b>75,221</b>	<b>88,316</b>	<b>94,992,046</b>	<b>107,503,074</b>	<b>130,855,002</b>

## of Industries, 1917, 1918 and 1919.

Cost of Materials.			Value of Products.		
1917.	1918.	1919.	1917.	1918.	1919.
\$	\$	\$	\$	\$	\$
564,959,467	636,392,864	736,404,245	754,637,940	839,086,118	949,234,158
141,953,358	196,080,057	227,841,353	265,448,565	342,385,878	400,902,541
204,732,121	238,483,815	120,772,003	400,385,086	443,455,779	299,480,387
87,169,851	94,000,304	132,917,264	225,522,189	251,699,154	354,617,529
61,303,948	58,755,096	85,187,804	104,804,689	94,577,196	129,980,237
51,129,102	62,276,642	73,664,746	148,396,426	167,367,972	203,502,828
12,859,171	13,476,912	15,263,730	29,935,226	28,266,256	33,820,948
65,575,226	93,754,000	66,421,263	133,618,658	173,649,073	122,889,030
5,408,152	9,497,591	8,161,940	32,374,060	35,354,311	35,983,529
90,790,104	91,819,081	47,791,682	171,650,905	170,042,852	149,016,160
19,092,845	19,039,791	27,651,755	46,786,233	55,411,487	64,272,208
102,258,684	105,561,485	113,845,317	197,488,770	205,213,617	215,530,983
13,385,578	30,296,947	34,374,524	37,244,678	76,630,411	88,454,139
155,381,195	223,533,091	142,169,549	386,420,242	485,082,107	337,909,365
29,731,838	27,284,638	43,148,702	80,864,273	89,814,764	135,137,547
<b>1,605,730,640</b>	<b>1,900,252,314</b>	<b>1,875,615,877</b>	<b>3,015,577,940</b>	<b>3,458,036,975</b>	<b>3,520,731,589</b>

Employees on Wages.			Wages Paid.		
1917	1918.	1919.	1917.	1918.	1919.
No.	No.	No.	\$	\$	\$
49,062	52,294	56,334	35,301,754	38,576,094	48,238,630
78,906	79,110	80,475	42,801,869	46,205,413	58,451,594
70,071	69,466	56,442	68,947,610	79,076,215	63,439,558
92,139	87,286	101,215	58,757,260	66,587,955	82,492,121
18,450	19,237	21,678	11,789,029	12,507,227	17,426,647
40,510	40,742	42,142	30,504,946	34,640,392	42,112,540
4,325	4,006	4,326	3,167,655	3,145,442	3,731,562
14,953	16,541	12,216	12,255,227	17,588,912	12,774,051
11,079	9,918	9,795	9,418,414	9,061,712	10,272,443
26,280	25,128	24,555	22,735,232	24,810,997	25,929,364
8,940	9,104	9,358	4,218,041	4,935,829	5,372,536
47,817	39,035	45,953	43,272,215	42,066,775	60,009,352
12,289	21,041	23,102	12,886,720	25,186,327	27,925,335
94,534	92,385	60,796	74,212,694	88,372,871	55,074,162
31,950	37,823	45,731	24,931,157	29,525,409	45,330,812
<b>601,305</b>	<b>603,116</b>	<b>594,118</b>	<b>455,199,823</b>	<b>522,287,570</b>	<b>558,580,707</b>

NOTE.—These statistics and those of the two following Tables may be compared with the corresponding statistics for 1915, given on pages 285-293 of the 1916-17 edition of the Year Book, under the reservation that in 1915 statistics were secured only from establishments having an output of \$2,500 or over, except in the case of flour and grist mills, butter and cheese factories, fish preserving factories, saw-mills, brick and tile yards, lime kilns and electric light plants, in which cases all establishments were included. In the above Table, and in those that follow, all establishments in all industries are included.

112.—Statistics of Number of Manufacturing Establishments, Capital, Cost of

No.	Groups and Kinds of Industries.	Establishments.			Capital.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
		8,009	7,968	8,031	299,032,589	340,499,122	359,366,536
<b>I. Food Products.</b>							
1	Baking powder and flavouring extracts.....	25	24	22	1,961,828	2,259,753	2,661,424
2	Beef extracts.....	3	4	4	223,634	419,812	437,163
3	Biscuits and confectionery.....	2,026	1,930	325	35,538,738	40,272,208	8,908,317
4	Bread and other bakery products.....	3,399	3,351	1,690	16,148,203	19,079,912	22,558,093
5	Butter and cheese.....	6	5	5	2,873,022	3,440,928	21,959,213
6	Chewing gum.....	12	9	10	3,094,648	3,892,627	3,892,627
7	Cocoa and chocolate products.....	49	37	39	6,621,831	5,614,866	5,201,523
8	Coffee and spices.....	19	21	24	3,377,943	4,051,708	6,112,630
9	Condensed milk.....	4	(1)	(1)	291,881	(1)	6,428,813
10	Confectioners' supplies.....	49	94	77	1,300,779	3,708,452	(1)
11	Evaporated fruits and vegetables.....	982	939	928	20,366,701	30,334,129	1,225,485
12	Fish, prepared.....	1,098	1,188	1,255	72,573,982	78,303,022	23,200,874
13	Flour and gristmill products.....	8	31	31	457,267	4,004,125	76,411,423
14	Foods, preserved.....	118	130	122	8,354,097	9,777,305	3,698,132
15	Fruit and vegetable canning.....	7	6	8	149,138	140,366	10,133,682
16	Ice cream cones.....	31	30	40	2,752,600	2,787,517	261,583
17	Jams and jellies.....	9	7	9	704,380	760,881	4,597,528
18	Macaroni and vermicelli.....	3	4	3	158,090	403,550	873,442
19	Maple sugar and syrup.....	(1)	(1)	3	(1)	(1)	270,661
20	Prepared flour.....	7	5	7	2,031,565	3,027,967	83,129
21	Rice cleaning and polishing.....	(2)	(2)	8	(2)	(2)	1,317,771
22	Prepared breakfast foods.....	4	7	13	102,187	18,510	2,251,703
23	Sausages.....	69	67	82	68,145,347	74,958,487	86,293
24	Slaughtering and meat packing.....	10	11	(3)	17,044,264	12,011,269	93,363,791
25	Slaughtering, not including meat packing.....	13	16	16	375,988	1,116,853	(3)
26	Stock foods.....	8	8	8	31,818,133	37,256,851	1,036,751
27	Sugar, refined.....	3	5	5	20,564	79,117	38,725,542
28	Tallow, refined.....	39	33	34	2,316,395	2,848,248	77,251
29	Vinegar and pickles.....	8	6	5	229,384	128,947	3,487,223
30	All other industries.....	4,112	4,191	4,366	203,308,587	237,724,097	104,469
<b>II. Textiles.</b>							
31	Awnings, tents and sails.....	46	47	46	3,140,423	3,218,150	265,819,050
32	Bags, cotton.....	11	13	14	5,693,056	8,259,332	2,162,913
33	Batting.....	3	3	(1)	450,267	468,767	7,831,046
34	Blankets and sweat pads.....	4	4	(1)	671,747	911,824	(1)
35	Carpets.....	5	6	8	2,534,799	2,691,460	(1)
36	Clothing, men's custom.....	1,555	1,490	1,523	9,307,153	7,672,674	2,421,464
37	Clothing, men's, factory.....	170	147	145	23,219,325	25,703,795	11,335,745
38	Clothing, women's, custom.....	1,406	1,503	1,545	6,001,022	6,332,963	27,293,401
39	Clothing, women's, factory.....	172	192	231	17,689,249	19,020,092	6,415,745
40	Cordage, rope and twine.....	8	8	7	7,454,701	10,056,519	23,343,671
41	Cotton and wool waste.....	3	6	6	104,020	532,889	8,979,407
42	Cottons.....	26	26	27	40,047,538	53,796,394	758,467
43	Embroidery.....	4	7	9	24,585	116,839	58,732,941
44	Felt goods.....	(1)	3	3	(1)	938,378	280,634
45	Flax, dressed.....	21	32	30	444,858	1,445,211	971,423
46	Fur goods.....	55	87	107	852,423	1,539,555	1,855,294
47	Furnishing goods, men's.....	84	84	88	10,584,764	12,647,413	2,372,722
48	Furs, dressed.....	12	10	11	575,423	585,714	15,087,269
49	Hats, caps and furs.....	198	199	208	12,349,578	14,431,530	510,510
50	Hosiery and knitted goods.....	102	108	114	29,073,961	31,092,866	14,553,814
51	Lace curtains.....	(1)	(1)	3	(1)	(1)	34,149,593
52	Laces and braids.....	8	8	12	417,081	598,867	70,558
53	Linen.....	3	4	4	1,250,876	592,228	931,157
54	Mats and rugs.....	6	6	4	173,156	205,482	748,244
55	Neckwear.....	14	17	16	1,292,853	1,368,633	350,196
56	Oiled clothing.....	4	7	7	81,601	146,900	1,652,274
57	Quilted goods.....	5	7	8	197,777	223,131	155,158
58	Regalia and society emblems.....	4	6	6	55,706	90,371	252,536
59	Shirts, collars and cuffs.....	(4)	7	11	(4)	358,168	176,906
60	Shoddy.....	12	13	13	1,176,031	730,821	563,345
61	Silk and silk goods.....	9	7	8	2,223,164	2,890,431	930,813
62	Textiles, dyeing and finishing.....	6	3	5	410,094	125,750	3,661,373
63	Thread.....	3	4	4	2,097,095	3,313,267	486,252
64	Waterproof clothing.....	17	13	16	1,159,935	1,317,371	1,865,544
65	Wool carding and fulling.....	34	20	25	695,452	520,602	1,865,544
66	Woollen goods.....	80	75	77	15,350,825	19,268,202	605,533
67	Wool pulling.....	3	5	7	94,850	411,974	21,717,226
68	Woollen yarns.....	8	10	10	2,783,576	3,767,390	899,361
69	All other industries.....	11	4	8	3,619,823	332,144	4,572,952
							1,514,124

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 374 and 375.

## Materials and Value of Products, by Individual Industries, 1917, 1918, 1919.

Cost of Materials.			Value of Products.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
\$	\$	\$	\$	\$	\$	
<b>564,959,467</b>	<b>636,392,864</b>	<b>736,404,245</b>	<b>754,637,940</b>	<b>839,086,118</b>	<b>949,234,158</b>	
1,464,869	1,800,801	2,158,297	2,947,682	3,153,706	3,963,790	1
114,140	296,161	282,613	262,606	700,615	662,694	2
44,201,470	51,152,127	28,306,722	77,223,581	85,555,848	52,238,131	3
72,011,677	79,848,476	101,711,972	85,731,339	94,927,032	52,318,484	4
948,192	1,379,754	1,806,193	2,193,846	3,006,748	119,316,569	5
2,872,218	3,835,479	5,702,809	5,270,316	6,306,379	3,688,554	6
6,746,909	6,258,527	8,113,554	9,840,150	8,517,581	9,718,185	7
6,255,130	9,433,762	12,481,946	8,090,897	12,413,818	10,892,892	8
34,282	(1)	(1)	240,731	(1)	15,880,033	9
1,162,757	3,105,784	951,814	2,470,344	4,873,572	(1)	10
18,482,484	21,559,425	19,329,966	26,787,114	34,007,628	1,676,317	11
183,586,936	218,646,546	229,835,706	224,191,735	262,537,122	32,172,753	12
140,795	3,338,079	3,455,151	443,022	4,922,462	262,786,759	13
10,463,221	8,751,574	9,450,632	16,385,964	14,027,855	4,988,128	14
112,600	120,204	216,034	269,868	306,154	16,017,606	15
1,783,769	3,167,129	6,540,795	2,997,782	4,802,656	510,058	16
545,263	669,246	657,942	1,006,750	1,213,732	9,042,851	17
349,694	662,352	654,647	604,622	858,499	1,152,652	18
(1)	(1)	(1)	(1)	(1)	988,817	19
2,529,954	3,236,090	4,011,027	3,329,625	3,687,855	260,162	20
(2)	(2)	(2)	(2)	(2)	4,603,812	21
47,071	84,103	247,559	78,781	123,097	3,328,422	22
117,196,755	140,626,199	175,133,821	153,279,252	185,806,221	383,815	23
38,669,565	30,396,905	(3)	53,441,466	43,425,445	233,936,913	24
523,404	823,301	916,822	873,934	(3)	(3)	25
53,179,911	45,403,037	86,308,204	73,329,260	1,368,438	1,450,160	26
51,003	61,933	70,762	69,550	58,812,219	102,630,086	27
1,267,687	1,651,107	2,122,324	93,627	93,627	127,053	28
217,711	84,763	148,376	2,947,549	3,473,727	4,267,568	29
<b>141,953,358</b>	<b>196,080,057</b>	<b>227,841,353</b>	<b>265,448,565</b>	<b>342,385,878</b>	<b>400,902,541</b>	<b>30</b>
1,585,691	3,091,497	1,502,538	2,613,887	4,575,109	2,491,567	31
3,469,752	16,845,513	14,417,112	12,490,588	19,536,283	16,949,134	32
164,797	225,946	(1)	323,989	460,260	(1)	33
470,117	701,413	(1)	834,606	1,077,475	(1)	34
1,192,063	1,085,390	1,878,318	1,881,631	1,850,182	3,114,461	35
6,092,339	7,300,189	11,025,710	14,195,400	15,943,600	22,718,260	36
16,189,255	18,121,914	25,842,772	31,334,575	33,835,793	47,780,306	37
5,202,602	7,372,837	7,206,605	11,180,815	14,529,681	15,279,448	38
15,505,720	18,321,089	24,358,284	32,174,842	32,364,340	44,381,117	39
5,055,642	8,395,039	7,479,383	8,323,391	13,714,620	9,813,149	40
78,005	909,051	1,550,771	292,301	1,227,889	1,866,659	41
19,506,546	34,289,862	43,816,517	40,139,202	66,399,228	82,642,949	42
26,038	69,873	163,676	70,794	213,999	425,521	43
(1)	351,637	504,967	(1)	614,749	832,985	44
93,800	869,673	386,701	485,416	1,872,293	1,452,128	45
848,920	1,884,617	2,384,348	1,523,552	3,057,422	3,991,614	46
8,312,877	10,527,796	12,161,847	14,554,670	17,876,956	21,236,715	47
266,804	164,818	212,319	1,071,805	802,083	960,188	48
8,446,416	8,438,424	12,027,858	15,551,825	17,112,425	20,790,334	49
19,443,108	26,527,287	26,635,683	33,770,588	45,755,129	45,207,292	50
(1)	(1)	(1)	(1)	(1)	158,240	51
290,252	431,360	702,241	666,264	822,764	1,363,663	52
229,150	241,296	249,117	645,628	538,933	521,306	53
24,141	101,797	140,479	179,747	215,483	259,715	54
1,185,101	1,261,228	1,746,751	2,102,255	2,368,159	3,388,737	55
60,310	114,589	121,226	127,184	199,549	187,881	56
121,574	126,635	196,917	240,287	314,516	379,606	57
22,195	38,956	50,883	66,983	110,758	140,018	58
(4)	482,069	571,823	(4)	758,823	1,014,420	59
1,442,905	2,133,008	1,307,640	2,561,382	2,784,853	1,907,309	60
837,041	1,436,229	1,975,539	2,372,001	2,451,220	3,317,181	61
160,426	31,685	91,775	398,559	80,650	274,054	62
988,487	1,718,064	2,519,225	2,619,456	3,007,877	4,120,507	63
1,033,642	1,435,081	1,457,041	2,197,808	2,379,429	2,844,044	64
624,163	525,901	380,477	857,098	745,245	576,749	65
11,807,960	15,301,474	15,437,410	18,647,576	25,063,515	28,082,977	66
180,841	468,332	2,537,234	219,984	621,214	2,861,809	67
2,383,011	4,311,902	3,844,539	3,640,468	6,499,445	6,195,493	68
3,602,658	426,586	871,418	5,182,002	603,9231	1,375,005	69



112—Statistics of Number of Manufacturing Establishments, Capital, Cost of Materials

No.	Groups and Kinds of Industries.	Establishments.			Capital.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>III. Iron and steel products.</b>	<b>1,049</b>	<b>1,064</b>	<b>1,135</b>	<b>307,407,980</b>	<b>339,483,020</b>	<b>349,929,834</b>
1	Boilers and engines.	58	66	64	23,502,637	28,891,924	31,277,375
2	Bridges, iron and steel.	18	26	18	17,488,547	21,293,248	19,734,810
3	Cash carriers and registers.	3	3	3	1,187,121	1,318,553	1,724,802
4	Castors.	3	3	3	78,650	120,373	112,354
5	Chains.	7	7	5	1,982,537	2,412,286	2,129,628
6	Cutlery and edge tools.	19	21	20	2,149,527	2,903,208	8,565,003
7	Dies and moulds.	10	10	9	845,453	1,829,811	1,846,360
8	Files.	4	3	3	590,757	666,647	779,752
9	Foundry and machine shop products.	629	667	731	69,915,032	84,122,446	100,606,542
10	Gas machines.	8	6	6	312,972	291,515	732,652
11	Hardware.	4	12	13	148,140	2,327,076	3,035,989
12	Hardware, carriage and saddlery.	5	4	3	2,232,349	1,676,549	1,542,179
13	Horseshoes.	(6)	5	5	(6)	519,222	572,517
14	Iron and steel products.	76	31	35	41,192,567	13,514,230	14,672,043
15	Iron, pig.	10	11	9	32,500,389	35,974,894	35,766,836
16	Knitting machines.	3	(1)	(1)	117,531	(1)	(1)
17	Needles.	(1)	(1)	3	(1)	(1)	284,994
18	Rolling mills and steel furnaces.	40	46	41	91,894,777	109,538,103	88,106,635
19	Safes and vaults.	5	6	5	705,824	570,456	555,866
20	Saws.	13	13	12	2,312,285	2,936,726	2,459,281
21	Scales.	8	10	10	1,002,378	1,306,940	1,356,585
22	Sewing machines and attachments.	4	4	4	2,136,518	2,515,699	3,106,256
23	Skates.	4	3	4	37,964	33,100	40,391
24	Stamps and stencils.	26	15	28	1,646,665	3,340,241	2,154,991
25	Stoves and hot air furnaces.	8	9	9	635,470	699,237	606,404
26	Structural ironwork.	9	7	6	482,131	562,634	604,291
27	Tools and implements.	24	21	30	3,073,079	6,108,273	9,906,419
28	Transmission machinery.	3	—	—	148,016	—	—
29	Wire.	20	26	28	4,353,351	6,921,002	11,466,745
30	Wire fencing.	19	18	19	3,668,343	3,351,249	3,422,999
31	All other industries.	9	11	19	1,066,970	1,739,378	2,759,135
	<b>IV. Timber and Lumber and their re-manufactures.</b>	<b>4,463</b>	<b>4,594</b>	<b>4,966</b>	<b>289,169,396</b>	<b>334,104,182</b>	<b>395,808,490</b>
32	Artificial limbs and trusses.	19	20	17	353,555	324,298	570,512
33	Baskets.	24	27	26	491,262	472,155	754,841
34	Billiard tables.	3	3	3	313,805	229,621	53,903
35	Boxes, cigar.	8	7	5	709,757	755,503	679,973
36	Boxes, wooden.	101	83	82	14,803,366	6,981,100	7,343,737
37	Clothes pins.	(1)	3	3	(1)	114,942	122,705
38	Coffins and caskets.	25	27	34	1,847,754	1,910,995	2,128,291
39	Cooperage.	110	103	97	2,871,475	2,031,469	2,020,404
40	Corks.	11	8	8	1,400,908	918,623	1,167,274
41	Furniture and upholstered goods.	247	238	270	30,091,111	22,661,391	24,400,099
42	Lasts and pegs.	8	7	7	543,063	715,613	980,880
43	Log products.	2,879	3,095	3,410	149,266,019	182,254,740	231,203,247
44	Lumber products.	753	712	733	37,841,915	31,806,543	39,144,039
45	Matches.	3	3	4	1,368,296	2,301,622	2,493,997
46	Picture frames.	37	35	45	1,023,128	891,978	1,009,643
47	Pumps and windmills.	63	52	45	4,199,748	820,599	2,478,060
48	Refrigerators.	11	10	13	633,448	813,686	1,923,580
49	Shooks, box.	5	6	7	450,398	375,755	926,780
50	Show cases.	17	14	17	713,369	585,324	807,981
51	Wickerware.	12	12	12	382,118	436,419	576,801
52	Woodenware.	8	9	(1)	735,156	847,173	(1)
53	Woodpulp.	34	38	39	35,958,756	71,708,223	69,896,588
54	Woodworking and turning.	75	69	77	2,824,289	3,632,136	4,273,129
55	All other industries.	10	13	12	346,700	514,274	852,026
	<b>V. Leather and its products.</b>	<b>1,249</b>	<b>1,672</b>	<b>2,057</b>	<b>76,315,861</b>	<b>76,652,767</b>	<b>88,272,360</b>
56	Belting and hose leather.	4	4	6	1,084,988	1,170,197	1,535,308
57	Boots and shoes.	185	161	161	31,486,345	33,274,753	38,680,581
58	Boot and shoe repairs.	386	754	1,125	481,704	1,000,574	1,677,408
59	Boot and shoe supplies.	18	18	22	518,541	536,840	711,382
60	Harness and saddlery.	485	562	593	9,095,402	8,485,259	7,983,049
61	Leather goods.	28	28	28	1,912,248	2,614,518	1,486,830
62	Leather, tanned, curried and finished.	136	139	113	30,582,483	28,435,806	34,623,567
63	Trunks and valises.	5	6	8	970,009	1,134,820	1,555,890
64	All other industries.	2	—	1	184,141	—	18,345

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 374 and 375.

and Value of Products, by Individual Industries, 1917, 1918, 1919—continued.

Cost of Materials.			Value of Products.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
\$	\$	\$	\$	\$	\$	
204,732,121	238,483,815	120,772,003	400,385,086	443,455,779	299,480,387	
8,042,105	12,662,788	9,789,399	26,269,442	29,470,457	24,708,143	1
5,772,752	5,708,826	4,822,722	16,321,936	22,954,919	12,258,486	2
174,838	7,063	17,656	653,806	626,524	1,231,505	3
24,758	28,486	43,182	50,147	62,385	88,965	4
651,720	960,266	799,570	1,758,576	2,020,295	1,611,358	5
623,534	909,398	1,363,609	1,895,616	2,993,276	5,075,597	6
135,717	271,734	223,909	637,933	903,831	802,288	7
139,770	191,062	98,589	633,760	745,660	605,370	8
23,623,101	27,788,059	26,301,761	66,945,483	82,493,897	81,710,215	9
130,729	90,190	130,477	420,543	339,003	369,136	10
136,527	1,094,086	772,586	225,128	3,328,848	2,782,621	11
858,806	1,018,862	544,289	3,424,090	3,860,327	1,941,826	12
(6)	140,238	162,095	(6)	357,641	392,124	13
32,020,232	11,356,319	9,371,449	58,797,766	19,366,041	16,623,477	14
10,659,576	26,164,722	6,811,898	25,767,060	32,102,900	24,965,092	15
29,671	(1)	(1)	81,250	(1)	(1)	16
(1)	(1)	33,616	(1)	(1)	346,292	17
108,638,956	135,308,883	43,950,662	170,679,000	209,706,319	89,229,144	18
135,444	134,352	288,547	479,673	585,635	1,058,073	19
738,878	603,367	531,436	2,008,385	2,031,706	1,639,153	20
568,348	417,317	347,536	1,334,416	1,363,181	1,580,339	21
567,497	512,431	891,097	1,688,702	1,561,791	2,649,922	22
7,578	2,606	10,262	28,646	18,366	43,274	23
947,609	1,290,136	1,590,720	2,247,420	2,696,816	3,554,809	24
97,532	175,519	195,846	306,363	425,244	454,211	25
222,500	261,061	140,472	481,410	579,990	468,390	26
888,708	1,890,836	1,639,249	2,270,401	6,761,886	4,655,460	27
91,695	—	—	249,598	—	—	28
3,407,028	5,015,819	5,347,224	6,187,145	9,050,831	10,084,232	29
3,337,304	3,550,927	3,589,849	5,473,667	5,163,477	5,205,481	30
2,059,208	928,462	971,296	3,067,724	1,884,533	3,345,404	31
87,169,851	94,000,304	132,917,264	225,522,189	251,699,154	354,617,529	
242,564	307,417	424,640	515,915	552,219	756,116	32
147,044	183,648	227,526	468,735	615,112	749,455	33
209,544	17,969	10,263	428,136	51,950	46,700	34
362,758	355,014	359,715	725,369	743,335	701,896	35
8,855,862	4,912,755	4,680,303	20,549,935	9,319,302	8,744,102	36
(1)	22,616	32,455	(1)	83,969	156,273	37
590,927	938,713	1,073,873	1,405,234	1,955,925	2,275,748	38
1,237,903	1,277,982	1,583,075	2,473,813	2,467,676	2,955,210	39
336,466	407,347	572,664	678,769	776,045	1,119,329	40
6,423,328	6,708,417	9,666,073	15,941,159	17,875,440	25,166,305	41
100,988	101,596	171,284	355,640	416,527	693,844	42
40,725,028	45,876,832	72,691,337	115,884,905	146,333,192	222,652,070	43
15,472,957	17,201,157	21,617,726	29,347,148	29,425,925	37,074,414	44
610,930	771,077	1,076,788	1,784,618	1,575,680	4,872,419	45
298,526	296,405	222,772	815,072	737,078	1,011,603	46
532,556	454,594	656,232	2,346,394	1,102,929	1,521,737	47
417,812	315,257	927,537	813,552	648,807	1,900,026	48
701,636	360,274	415,242	1,183,137	543,700	792,540	49
242,507	238,141	467,497	751,208	551,457	1,095,005	50
119,310	163,260	318,135	464,760	540,225	751,015	51
223,723	205,436	—	583,923	524,718	—	52
7,556,233	10,768,036	13,560,287	24,496,679	30,895,556	34,869,831	53
1,651,386	1,848,493	1,709,763	3,234,510	3,424,199	3,798,695	54
109,923	267,868	452,077	273,578	538,188	913,196	55
61,303,948	58,755,096	85,187,804	104,804,689	94,577,196	129,980,237	
852,328	707,387	1,245,101	1,249,841	963,994	1,798,954	56
26,780,543	27,318,772	40,523,696	49,170,062	46,387,665	63,579,035	57
300,912	611,974	1,174,756	852,783	1,776,137	3,242,204	58
624,648	575,460	974,069	1,060,996	965,805	1,541,785	59
4,779,949	4,617,800	4,812,851	8,768,722	8,117,978	8,610,614	60
775,831	917,035	1,065,703	1,478,447	2,004,204	2,306,376	61
26,624,477	23,681,659	34,297,878	41,117,128	33,273,925	46,925,933	62
462,271	325,009	1,066,767	900,020	1,087,488	1,913,961	63
102,989	—	26,983	206,690	—	61,375	64

## 112.—Statistics of Number of Manufacturing Establishments, Capital, Cost of Materials

No.	Groups and Kinds of Industries.	Establishments.			Capital.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>VI. Paper and printing</b> .....	<b>1,819</b>	<b>1,762</b>	<b>1,803</b>	<b>224,176,986</b>	<b>242,046,328</b>	<b>288,974,274</b>
1	Blue prints.....	7	7	12	224,843	88,210	121,490
2	Boxes and bags, paper.....	83	77	80	7,695,125	8,871,831	8,471,923
3	Fly paper.....	4	3	3	49,146	39,493	51,057
4	Lithographing and engraving.....	73	79	78	6,560,512	7,098,668	8,112,958
5	Maps.....	6	5	5	39,210	32,796	37,238
6	Paper.....	26	31	33	8,404,264	12,520,765	16,553,276
7	Paper board.....	3	(7)	(7)	1,863,133	(7)	(7)
8	Paper patterns.....	5	5	4	324,734	360,072	220,916
9	Printing and bookbinding.....	613	600	640	19,444,104	20,345,806	22,099,455
10	Printing and publishing.....	916	860	858	30,978,517	30,110,354	35,886,918
11	Stationery goods.....	40	46	42	4,314,437	4,197,663	5,057,939
12	Stereotyping and electrotyping.....	9	12	10	210,299	234,815	195,318
13	Wall paper.....	3	4	4	1,148,920	1,557,294	2,081,829
14	Waxed paper.....	5	5	5	317,260	333,165	461,084
15	Wood pulp and paper.....	23	26	27	142,424,335	157,115,716	180,317,500
16	All other industries.....	3	2	2	178,097	139,680	305,373
	<b>VII. Liquors and beverages</b> .....	<b>433</b>	<b>391</b>	<b>405</b>	<b>48,178,985</b>	<b>47,973,751</b>	<b>45,239,675</b>
17	Aerated and mineral waters.....	335	305	320	4,905,062	4,073,133	6,545,803
18	Liquors, distilled.....	7	6	5	12,005,809	10,018,168	8,154,002
19	Liquors, malt.....	74	63	57	29,580,433	32,493,507	28,119,447
20	Liquors, vinous.....	13	11	16	1,144,963	932,887	1,431,934
21	Malt.....	4	6	7	542,718	516,056	935,489
	<b>VIII. Chemicals and Allied Products</b> .....	<b>333</b>	<b>337</b>	<b>312</b>	<b>117,903,399</b>	<b>134,377,823</b>	<b>138,133,759</b>
22	Ammonia.....	3	3	3	341,418	432,440	511,414
23	Ashes, pot and pearl.....	3	(1)	(1)	8,643	(1)	(1)
24	Carbide of calcium.....	(1)	4	3	(1)	8,468,035	8,588,893
25	Carbonic acid gas.....	3	4	4	345,551	439,598	453,850
26	Disinfectants.....	6	7	7	37,001	67,942	146,954
27	Drugs and chemicals.....	65	38	34	22,162,727	26,029,530	13,495,257
28	Dyes and colours.....	(1)	3	4	(1)	194,917	245,642
29	Explosives.....	9	10	7	15,846,540	13,943,670	12,837,988
30	Fertilizers.....	12	15	15	2,763,101	3,064,111	3,545,554
31	Insect powder.....	3	(1)	4	36,495	(1)	17,683
32	Oils.....	23	19	18	4,273,288	4,493,292	3,925,103
33	Oxygen gas.....	4	5	12	536,500	1,215,645	1,376,049
34	Paints and varnishes.....	46	45	45	29,495,363	15,784,610	17,830,072
35	Patent medicines.....	97	118	102	6,047,732	8,821,901	11,711,837
36	Perfumery and cosmetics.....	7	5	5	343,316	342,566	441,438
37	Petroleum.....	6	10	10	16,498,819	35,745,410	43,158,655
38	Salt.....	10	9	7	1,609,140	1,819,274	2,961,036
39	Starch and glucose.....	13	12	7	3,670,806	3,784,664	6,332,658
40	Wood distillation.....	13	13	13	4,050,951	3,612,573	5,760,395
41	Wood preservative.....	(1)	4	(1)	(1)	1,133,850	(1)
42	All other industries.....	10	13	12	9,836,001	4,983,795	4,793,291
	<b>IX. Clay, Glass and Stone products</b> .....	<b>913</b>	<b>793</b>	<b>558</b>	<b>79,420,372</b>	<b>73,528,361</b>	<b>86,081,326</b>
43	Abrasive goods.....	11	12	5	3,097,289	4,533,523	597,777
44	Abrasives, artificial.....	(8)	(8)	6	(8)	(8)	3,990,232
45	Brick, tile and pottery.....	251	(9)	(9)	18,740,386	(9)	(9)
46	Cement, Portland.....	11	10	8	34,109,104	26,120,913	39,475,774
47	Cement products.....	220	141	91	2,478,127	1,265,271	1,049,868
48	Fire clay and fire brick.....	3	(9)	(9)	579,287	(9)	(9)
49	Clay products.....	(10)	230	179	(10)	22,180,566	23,939,746
50	Glass.....	11	9	8	5,344,573	7,433,525	7,231,774
51	Glass stained, cut and ornamental	18	22	24	601,352	623,211	730,350
52	Lime.....	66	66	52	4,495,629	4,048,217	4,106,774
53	Mirrors and plate glass.....	18	16	18	2,159,321	1,123,129	857,926
54	Monuments and tombstones.....	237	213	(5)	3,022,915	2,885,743	(5)
55	Paving blocks.....	4	(1)	(1)	322,414	(1)	(1)
56	Sewer pipe.....	6	(9)	(9)	2,458,383	(9)	(9)
57	Sand, lime and brick.....	(8)	9	8	(8)	989,451	1,036,751
58	Stone, artificial.....	7	8	(12)	94,140	37,999	(12)
59	Statuary and art goods.....	3	3	3	74,839	87,596	130,434
60	Stone, monumental, ornamental, etc.....	42	48	156	1,292,524	1,760,683	2,934,820
61	Wall plaster.....	3	3	(5)	475,289	117,375	(5)
62	All other industries.....	2	3	-	74,800	311,159	-

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 374 and 375—

and Value of Products, by Individual Industries, 1917, 1918, 1919.—continued.

Cost of Materials.			Value of Products.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
\$	\$	\$	\$	\$	\$	
51,129,102	62,276,642	73,664,746	148,396,426	167,367,972	203,502,828	
64,765	70,001	110,464	158,536	161,408	221,431	1
5,061,013	5,067,689	5,470,325	10,313,025	9,761,816	11,376,796	2
55,461	41,787	68,722	124,954	86,506	172,041	3
1,992,599	2,650,452	2,757,117	5,951,973	6,675,480	8,925,205	4
8,901	8,471	26,974	78,170	52,186	72,573	5
5,371,944	6,826,284	8,676,095	9,383,729	12,792,666	16,238,573	6
410,971	(7)	(7)	1,623,287	(7)	(7)	7
98,626	92,327	96,067	479,271	608,380	548,142	8
6,224,349	7,975,500	9,008,810	19,457,746	22,689,803	26,176,133	9
7,389,524	8,642,480	10,963,748	31,453,622	30,325,123	40,153,814	10
1,938,049	2,844,538	3,503,542	4,723,625	5,299,369	6,800,335	11
63,285	178,062	55,682	412,702	515,547	305,471	12
294,218	603,623	842,016	1,041,321	1,816,193	2,453,526	13
295,433	489,644	527,723	515,719	821,562	820,736	14
21,784,685	26,707,573	31,445,404	62,459,916	75,621,212	88,878,053	15
75,279	78,211	112,057	218,830	140,721	357,999	16
12,859,171	13,476,912	15,263,736	29,935,226	28,266,256	33,820,948	
1,730,138	2,210,745	3,385,583	4,340,496	5,392,166	7,366,759	17
3,059,371	2,271,178	724,268	8,025,089	6,844,698	1,288,477	18
6,746,640	6,543,058	8,093,403	15,425,763	16,370,946	20,169,074	19
267,400	231,312	685,525	560,294	511,217	1,527,787	20
1,055,622	2,220,619	2,874,951	1,483,584	3,147,229	3,468,851	21
65,575,226	93,754,000	66,421,263	133,618,658	173,649,073	122,889,030	
93,124	205,195	129,478	265,175	499,437	331,581	22
10,000	(1)	(1)	20,080	(1)	-	23
(1)	1,785,733	1,136,629	(1)	5,205,323	3,803,118	24
22,622	29,662	37,042	184,472	221,001	332,659	25
10,702	44,760	53,375	65,505	117,228	159,902	26
9,562,021	16,286,788	2,014,435	21,662,174	38,262,587	5,191,598	27
(1)	139,191	156,870	(1)	222,882	279,542	28
13,975,730	19,262,115	2,016,573	26,163,373	28,408,247	4,494,394	29
1,229,550	1,594,059	1,461,291	2,295,074	2,614,345	2,541,097	30
28,021	(1)	3,916	71,223	(1)	16,136	31
5,456,998	5,759,895	7,908,060	7,476,011	7,080,512	9,768,699	32
24,667	41,253	96,779	540,765	732,680	840,119	33
9,824,799	9,203,530	10,958,666	20,035,954	17,796,518	19,506,653	34
2,915,903	4,944,510	5,898,461	8,774,014	12,355,053	13,877,812	35
171,139	168,604	213,695	471,673	418,076	550,538	36
14,454,933	24,454,575	26,264,839	29,579,303	37,866,907	43,256,317	37
-	541,887	-	1,046,717	1,712,158	1,714,961	38
3,777,833	4,992,705	5,709,203	5,292,771	7,788,742	7,953,273	39
2,169,821	3,319,731	1,173,473	5,261,176	7,634,122	2,807,037	40
(1)	281,367	(1)	(1)	478,235	(1)	41
1,847,323	702,440	1,188,478	4,413,138	4,155,020	5,463,654	42
5,408,152	9,497,591	8,161,940	32,374,060	35,354,311	35,983,529	
1,212,623	1,900,285	62,940	3,181,932	5,439,046	232,970	43
(8)	(8)	1,206,384	(8)	(8)	3,012,669	44
(17)	1,702,757	2,078,524	4,324,243	(9)	(9)	45
912,139	757,281	383,684	7,825,922	7,156,480	8,769,833	46
(9)	(9)	(9)	3,926,634	1,486,245	921,478	47
(10)	496,772	(17)	360,685	(9)	(9)	48
1,306,934	2,056,739	2,267,686	(10)	6,409,005	7,901,249	49
220,982	230,612	473,878	4,873,471	6,662,106	7,171,006	50
(17)	585,266	(17)	1,558,487	744,727	1,163,712	51
393,960	357,133	504,355	1,056,347	2,273,163	2,068,752	52
943,712	900,789	(5)	2,628,073	687,441	1,010,453	53
16,742	(1)	(1)	73,814	2,872,117	(5)	54
(9)	(9)	(9)	748,477	(1)	(1)	55
(8)	43,150	79,243	(8)	194,323	(9)	56
11,887	34,321	(12)	38,259	174,839	455,005	57
11,331	10,761	20,489	64,526	70,056	(12)	58
266,546	350,438	1,084,757	876,045	1,035,154	127,850	59
46,581	56,997	(5)	107,975	111,723	3,158,552	60
64,715	14,290	-	113,452	37,886	(5)	61
38131—24½						62



## 112.—Statistics of Number of Manufacturing Establishments, Capital, Cost of Materials

No.	Groups and Kinds of Industries.	Establishments.			Capital.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>X. Metals and metal products other than iron and steel</b>	<b>2,311</b>	<b>2,392</b>	<b>2,942</b>	<b>123,459,129</b>	<b>132,757,003</b>	<b>145,351,322</b>
1	Aluminium ware	4	4	4	5,219,730	5,022,703	6,932,197
2	Babbitt metal and solder	8	8	11	758,509	474,612	2,249,398
3	Brass castings	76	73	59	13,525,945	17,939,658	15,054,981
4	Brass and iron beds	6	7	8	444,094	598,111	701,343
5	Coppersmithing	(1)	3	3	(1)	125,271	98,127
6	Electroplating	14	13	23	479,673	2,012,309	695,673
7	Engravers' supplies	3	3	3	23,418	30,233	35,427
8	Ferro alloys	4	3	(13)	2,200,512	1,138,379	(13)
9	Gold and silver, reducing and refining	4	4	(14)	1,643,550	840,917	(14)
10	Jewellery and repairs	438	459	776	4,607,579	5,090,563	7,720,361
11	Lamps and lanterns	9	9	10	811,026	382,209	552,125
12	Lightning rods	7	7	8	132,847	268,923	311,810
13	Metallic roofing and flooring	19	20	18	3,973,199	4,715,038	5,056,170
14	Pins	3	3	(1)	288,238	294,318	(1)
15	Plumbers' supplies	22	24	23	4,480,231	5,626,700	5,039,679
16	Plumbing and tinsmithing	1,656	1,704	1,963	26,615,027	28,531,076	31,258,215
17	Silversmithing	15	14	11	2,401,524	2,494,543	2,624,346
18	Stamped enamelware	(15)	13	(15)	(15)	112,335	(15)
19	Smelting	17	17	14	55,056,235	56,135,981	66,038,681
20	All other industries	6	4	8	797,792	923,124	1,432,789
	<b>XI. Tobacco and its manufactures</b>	<b>176</b>	<b>153</b>	<b>144</b>	<b>27,277,858</b>	<b>32,948,356</b>	<b>37,639,965</b>
21	Tobacco, chewing, smoking and snuff	30	29	30	9,038,196	9,663,557	12,890,715
22	Tobacco, cigars and cigarettes	146	124	114	18,239,662	23,284,799	24,749,250
	<b>XII. Vehicles for land and air transportation</b>	<b>970</b>	<b>893</b>	<b>897</b>	<b>219,766,079</b>	<b>179,799,539</b>	<b>122,883,658</b>
23	Aeroplanes	3	(1)	—	2,044,426	(1)	(1)
24	Automobiles	11	10	11	28,192,858	31,550,353	34,949,739
25	Automobile parts and accessories	24	25	42	3,155,893	3,386,271	8,364,991
26	Bicycles	13	4	5	1,212,331	1,890,965	2,150,427
27	Car repairs	125	112	152	68,763,298	72,322,688	76,322,688
28	Carriages and wagons	758	711	661	15,281,317	14,904,531	15,512,683
29	Carriage and wagon materials	23	21	16	2,841,371	3,053,391	2,835,214
30	Cars and car works	13	8	10	98,274,585	52,217,295	59,070,604
31	All other industries	—	2	—	—	474,042	—
	<b>XIII. Vessels for water transportation</b>	<b>201</b>	<b>204</b>	<b>177</b>	<b>42,986,932</b>	<b>57,444,939</b>	<b>72,114,691</b>
32	Boats and canoes	131	114	99	1,465,342	1,145,906	1,260,663
33	Shipbuilding and repairs	70	90	78	41,501,590	56,299,033	70,854,028
	<b>XIV. Miscellaneous industries</b>	<b>2,378</b>	<b>2,595</b>	<b>2,616</b>	<b>689,385,347</b>	<b>742,635,175</b>	<b>753,834,956</b>
34	Agricultural implements	90	84	88	70,493,801	74,410,603	84,331,715
35	Ammunition	122	91	4	66,112,367	54,112,884	4,725,283
36	Artificial leathers and flowers	15	7	7	517,748	237,235	320,732
37	Asbestos	8	8	5	1,180,636	1,253,580	878,398
38	Asphalt	13	3	(1)	933,052	594,441	(1)
39	Beekeepers' supplies	(1)	4	3	(1)	20,200	46,783
40	Blacking	31	31	36	650,165	972,858	1,194,542
41	Boiler compound	4	4	6	14,467	176,789	144,994
42	Boots and shoes, rubber	6	10	10	6,602,967	12,100,057	14,202,879
43	Brooms and brushes	68	78	78	1,901,602	2,625,918	2,987,412
44	Buttons	21	20	19	793,247	920,556	1,260,836
45	Celluloid goods	(1)	(1)	3	(1)	(1)	1,832,781
46	China and glass decorating	3	3	3	26,145	23,527	24,379
47	Church ornaments	4	4	3	12,950	6,940	10,788
48	Clocks and watches	(1)	4	4	(1)	254,413	325,283
49	Coke	7	8	7	15,271,939	17,811,917	24,528,611
50	Combs	5	4	4	105,041	153,878	188,330
51	Conduits	3	3	3	439,865	424,747	520,945
52	Corsets and supplies	14	14	16	3,296,856	3,764,487	4,058,092
53	Cream separators	3	5	6	1,835,431	2,026,045	6,314,089
54	Dental supplies	7	6	9	303,904	250,400	317,912
55	Electric apparatus and supplies	75	68	95	38,523,398	43,285,405	45,956,399
56	Electric light and power	666	795	805	356,004,168	401,942,402	416,512,010
57	Elevators	6	5	5	3,226,664	2,837,995	2,748,014
58	Elevator repairs	12	13	14	701,495	843,550	1,042,302
59	Enamelware	3	3	4	1,965,594	2,134,355	3,650,979
60	Fancy goods	12	14	14	602,988	918,007	723,770
61	Fire extinguishers	4	4	6	1,024,970	342,374	755,196
62	Fire works	(1)	(1)	3	(1)	(1)	140,701

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 374 and 375.

and Value of Products, by Individual Industries, 1917, 1918, 1919.—continued.

Cost of Materials.			Value of Products.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
\$	\$	\$	\$	\$	\$	
90,799,104	91,819,081	47,791,682	171,650,995	170,042,852	149,016,160	
2,550,210	3,072,113	2,899,641	7,431,380	8,489,356	7,581,366	1
1,455,993	1,344,918	2,034,762	1,742,885	1,728,096	3,080,008	2
15,671,651	14,542,091	7,194,157	24,412,514	24,126,878	13,760,311	3
305,384	317,655	666,867	560,951	766,247	1,129,182	4
(1)	44,116	35,421	(1)	117,101	111,786	5
131,026	165,807	204,025	348,428	398,379	789,253	6
42,055	37,091	41,756	84,324	81,874	88,449	7
982,206	610,444	(13)	3,747,005	4,153,802	(13)	8
1,920,365	3,133,073	(14)	3,028,609	4,331,010	(14)	9
1,919,670	2,162,130	3,605,058	4,993,798	5,696,575	9,415,456	10
406,687	331,244	319,588	1,066,093	780,490	839,820	11
164,636	262,257	257,784	231,463	471,646	457,327	12
3,113,425	3,475,056	3,499,214	5,931,672	6,362,780	6,420,349	13
139,875	195,318	(1)	277,683	434,280	(1)	14
6,622,309	2,422,320	1,049,360	11,463,347	5,062,457	2,907,436	15
18,818,887	22,526,601	24,540,989	34,584,083	41,870,529	47,009,238	16
803,202	667,538	828,998	1,798,865	1,802,702	2,456,410	17
(15)	32,812	(15)	(15)	134,340	(15)	18
35,671,420	36,103,696	(17)	69,262,673	62,482,256	51,626,816	19
71,103	372,801	614,062	685,132	752,054	1,342,953	20
19,092,845	19,039,791	27,651,755	46,786,233	55,411,487	64,272,208	
3,791,055	4,818,988	8,578,475	14,641,039	17,527,513	18,138,905	21
15,301,790	14,220,803	19,073,280	32,145,194	37,883,974	46,183,303	22
102,258,684	105,561,485	113,845,317	197,488,770	205,213,617	215,530,983	
2,067,359	(1)	—	6,077,176	(1)	—	23
35,585,820	37,058,645	51,690,715	54,466,273	66,814,266	80,619,846	24
3,795,308	3,636,453	5,221,439	6,519,868	6,278,431	8,691,824	25
702,514	691,375	726,387	1,457,994	1,601,262	1,493,628	26
14,969,700	14,870,744	18,806,667	36,939,211	40,972,617	52,245,570	27
5,040,957	3,985,681	3,768,792	10,939,065	9,477,489	9,506,198	28
1,416,576	1,745,414	1,492,905	2,524,656	4,487,324	3,011,598	29
38,680,450	40,951,923	32,138,412	78,564,527	66,068,705	59,962,319	30
—	2,621,250	—	—	9,513,523	—	31
13,385,578	30,296,947	34,374,524	37,244,678	76,630,411	88,454,139	
720,906	589,551	575,289	1,963,328	1,831,000	1,964,426	32
12,664,672	29,707,396	33,799,235	35,281,350	74,799,411	86,489,713	33
155,381,195	223,533,091	142,169,549	386,420,222	485,082,107	337,909,365	
15,641,019	17,319,840	16,978,378	32,471,300	34,853,673	37,715,331	34
42,626,603	100,947,392	1,506,802	112,866,838	186,034,920	3,709,428	35
178,317	190,594	332,202	564,416	450,603	676,014	36
130,473	106,708	214,725	402,277	317,066	546,870	37
262,550	117,008	(1)	674,900	295,170	(1)	38
(1)	12,358	38,391	(1)	28,328	73,715	39
523,603	1,050,115	920,603	1,101,461	1,822,949	1,875,202	40
10,328	55,630	70,305	27,720	137,876	188,144	41
3,224,010	5,785,027	7,862,961	9,682,793	17,188,075	19,351,794	42
1,348,647	1,958,433	2,147,857	2,395,876	3,473,876	4,284,915	43
301,323	313,048	430,800	800,356	986,332	1,343,629	44
(1)	(1)	320,220	(1)	(1)	514,175	45
3,695	4,671	9,978	14,300	13,555	21,240	46
15,060	15,570	16,970	37,900	36,650	41,300	47
(1)	302,555	339,739	(1)	474,673	500,757	48
7,065,555	9,042,598	9,275,943	10,635,030	13,826,778	13,145,228	49
80,584	133,325	179,568	220,936	303,188	396,433	50
323,947	523,411	425,132	507,535	711,063	667,159	51
1,519,590	1,782,004	2,250,762	3,275,262	3,495,752	4,332,737	52
614,825	1,163,571	475,345	1,750,076	2,348,614	1,826,273	53
544,770	697,883	779,266	723,737	812,530	999,966	54
20,158,007	13,780,667	15,257,617	40,204,245	30,045,399	34,187,658	55
—	—	—	44,536,848	53,449,133	57,486,458	56
1,037,230	569,201	553,096	2,608,335	2,023,839	1,483,650	57
81,260	828,054	609,771	485,950	1,211,269	1,340,978	58
380,659	260,156	463,978	1,213,000	1,048,522	1,932,373	59
459,018	439,627	322,086	998,575	1,087,409	997,560	60
163,368	20,610	565,345	549,384	93,805	841,166	61
(1)	(1)	119,599	(1)	(1)	251,999	62

## 112.—Statistics of Number of Manufacturing Establishments, Capital, Cost of Materials

No.	Groups and Kinds of Industries.	Establishments.			Capital.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>XIV. Miscellaneous Industries—concluded.</b>						
1	Flour paste.....	3	4	(1)	69,790	84,506	(1)
2	Fringes, cords and tassels.....	4	4	4	184,843	255,708	300,219
3	Gas, lighting and heating.....	43	43	39	23,709,145	27,018,835	28,185,654
4	Gloves and mittens.....	54	57	56	4,375,299	6,291,269	6,467,669
5	Glue.....	7	11	11	930,552	1,562,086	1,620,433
6	Hairwork.....	11	9	10	304,303	428,820	446,543
7	Hay, baled.....	(1)	3	(1)	(1)	33,900	(1)
8	Ice, manufactured.....	18	17	13	1,787,768	1,707,828	1,683,574
9	Incubators.....	(1)	3	3	(1)	80,616	86,576
10	Inks.....	12	14	16	833,235	1,022,089	1,234,672
11	Instruments, mathematical and scientific.....	4	5	6	13,650	70,770	67,943
12	Jewellery cases.....	5	6	6	88,921	196,616	214,360
13	Labels and tags.....	4	4	3	273,412	387,293	173,472
14	Mattresses and spring beds.....	56	50	55	4,067,696	4,380,520	5,998,895
15	Mica, cut.....	11	11	13	539,008	544,396	588,411
16	Mops.....	3	3	3	45,538	53,541	51,372
17	Musical instruments.....	52	47	41	9,600,982	8,431,876	8,687,532
18	Musical instrument materials.....	11	11	11	1,814,320	1,427,400	1,857,355
19	Optical goods.....	24	29	46	603,741	769,059	991,773
20	Patterns.....	15	26	27	66,336	140,015	142,565
21	Phonographs and gramophones.....	4	10	20	138,143	3,043,185	4,591,188
22	Photography.....	437	502	557	1,364,373	1,458,953	1,788,731
23	Photographic materials.....	(1)	(1)	3	(1)	(1)	4,821,450
24	Pipe and boiler covering.....	3	3	3	168,141	150,696	133,527
25	Pipes, tobacco.....	4	5	5	14,905	26,260	24,918
26	Plaster.....	4	4	6	550,419	45,200	2,225,349
27	Plaster products.....	(1)	9	3	(1)	47,496	37,487
28	Printer supplies.....	(1)	(1)	5	(1)	(1)	65,088
29	Pulleys.....	4	4	4	149,049	156,875	180,844
30	Railway supplies.....	4	6	5	259,522	908,121	800,860
31	Roofing and roofing materials.....	57	61	64	3,806,035	4,887,374	5,416,146
32	Rubber and elastic goods.....	22	20	22	21,793,016	19,575,680	28,584,715
33	Seed cleaning and preparing.....	16	15	15	1,916,952	2,266,254	2,487,705
34	Signs.....	70	71	95	440,574	487,447	739,128
35	Soap.....	34	28	26	10,380,117	13,086,933	12,017,281
36	Spinning wheels.....	(1)	3	3	(1)	7,830	13,662
37	Sporting and athletic goods.....	7	8	10	320,999	355,531	479,106
38	Steam boiler packing.....	(1)	(1)	3	(1)	(1)	198,581
39	Surgical appliances.....	(1)	4	4	(1)	282,369	310,096
40	Sweeping compounds.....	10	10	7	51,862	55,300	56,779
41	Toys and games.....	14	15	14	227,626	369,219	502,685
42	Typewriters and supplies.....	5	5	5	233,726	317,878	333,208
43	Umbrellas.....	10	10	8	319,060	367,562	473,637
44	Vacuum cleaners.....	5	5	5	111,610	69,544	110,185
45	Washing compounds.....	9	10	13	94,133	119,196	145,777
46	Washing machines and wringers.....	5	6	7	662,950	738,020	1,256,766
47	Wax candles.....	7	7	8	97,843	120,541	159,120
48	Weatherstrips.....	10	13	11	58,917	118,171	97,653
49	Whips.....	(1)	4	(1)	(1)	375,907	(1)
50	Window blinds and shades.....	8	7	9	1,737,108	2,331,392	2,258,899
51	Window fixtures.....	6	5	6	113,025	159,387	124,176
52	Not specified.....	13	18	4	1,915,181	1,673,044	37,634
53	All other industries.....	71	77	37	11,612,062	9,701,104	4,819,402
	<b>XV. Hand Trades.....</b>	<b>5,976</b>	<b>6,788</b>	<b>7,941</b>	<b>47,880,234</b>	<b>62,327,452</b>	<b>81,239,472</b>
54	Automobile repairs.....	497	675	1,239	4,431,926	5,832,710	13,668,655
55	Bicycle repairs.....	96	114	136	417,862	439,015	527,539
56	Blacksmithing.....	3,694	3,964	3,867	7,972,422	8,431,021	9,042,362
57	Dyeing and cleaning and laundry work.....	293	312	361	5,484,452	5,871,812	7,954,354
58	Housebuilding.....	900	995	1,475	24,905,927	36,722,958	45,011,116
59	Interior decorations.....	15	15	11	834,939	685,482	502,124
60	Laundries, steam.....	34	26	(11)	674,181	803,881	(11)
61	Lock and gunsmithing.....	42	43	48	1,571,867	1,206,790	1,341,910
62	Painting and glazing.....	405	644	804	1,586,658	2,333,783	3,191,412

(1) Included in all other industries.

(2) Included in flour and grist mill products 1917 and 1918.

(3) Included in slaughtering and meat packing in 1919.

(4) Included in men's furnishing goods in 1917.

(5) Included in stone, monumental, etc.

(6) Included in iron and steel products in 1917.

(7) Included in paper in 1918 and 1919.

(8) Included in abrasive goods in 1917 and 1918.

and Value of Products, by Individual Industries, 1917, 1918, 1919.—concluded.

Cost of Materials.			Value of Products.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
\$	\$	\$	\$	\$	\$	
113,999	150,606	(1)	151,482	247,715	(1)	<b>1</b>
81,483	144,788	210,527	233,846	319,435	483,194	<b>2</b>
3,243,851	3,471,214	7,718,054	10,691,584	8,413,236	11,344,021	<b>3</b>
5,265,806	5,636,549	5,367,948	10,885,011	11,078,231	9,310,255	<b>4</b>
526,065	812,923	748,051	1,053,436	1,488,147	1,510,112	<b>5</b>
100,182	97,614	203,465	265,213	258,380	395,568	<b>6</b>
(1)	63,084	(1)	(1)	110,200	(1)	<b>7</b>
24,120	23,943	20,357	443,863	487,079	567,695	<b>8</b>
(1)	34,487	68,454	-	92,209	126,080	<b>9</b>
615,725	876,672	969,595	1,327,392	1,746,935	2,019,037	<b>10</b>
9,166	32,852	36,368	19,497	77,035	103,331	<b>11</b>
22,256	34,629	62,731	71,877	128,502	188,078	<b>12</b>
83,833	107,090	95,610	203,842	290,861	247,989	<b>13</b>
2,447,523	3,065,369	4,157,533	4,507,768	6,115,573	8,894,607	<b>14</b>
152,334	89,063	204,441	409,107	411,845	464,149	<b>15</b>
50,795	56,973	75,796	93,394	89,765	114,667	<b>16</b>
3,071,038	3,303,559	3,959,417	7,065,955	6,903,743	8,477,866	<b>17</b>
706,151	761,955	1,037,601	1,632,991	1,740,014	2,294,577	<b>18</b>
197,663	209,909	350,336	661,431	892,829	1,301,724	<b>19</b>
22,106	38,184	38,785	136,412	285,259	297,853	<b>20</b>
39,317	752,107	2,503,026	137,910	2,981,517	6,536,835	<b>21</b>
459,528	631,590	798,682	1,743,168	2,285,944	3,183,950	<b>22</b>
(1)	(1)	1,151,980	(1)	(1)	2,691,108	<b>23</b>
80,485	127,527	88,493	153,420	210,616	200,408	<b>24</b>
6,834	13,236	48,719	28,188	46,439	103,795	<b>25</b>
211,997	6,553	426,480	241,332	31,013	1,323,232	<b>26</b>
(1)	23,310	29,660	(1)	78,280	96,784	<b>27</b>
(1)	(1)	9,334	(1)	(1)	62,137	<b>28</b>
61,205	85,041	56,256	149,167	198,531	171,874	<b>29</b>
71,348	333,718	293,568	210,325	713,715	727,386	<b>30</b>
2,619,377	3,291,870	4,014,468	4,786,871	5,743,886	7,073,220	<b>31</b>
16,535,579	15,722,893	19,671,453	33,956,395	29,092,469	36,651,640	<b>32</b>
3,465,354	4,589,313	5,778,753	4,387,001	6,112,114	7,138,210	<b>33</b>
257,562	112,781	383,072	924,290	869,364	1,649,957	<b>34</b>
11,707,158	14,595,624	12,070,181	17,847,074	20,944,909	17,384,260	<b>35</b>
(1)	1,048	1,985	(1)	7,183	9,485	<b>36</b>
221,001	335,295	246,860	399,234	566,439	576,657	<b>37</b>
(1)	(1)	74,534	(1)	(1)	146,778	<b>38</b>
(1)	72,205	106,186	(1)	228,124	294,259	<b>39</b>
21,368	28,715	27,266	67,041	84,361	83,171	<b>40</b>
78,689	115,329	196,912	215,405	405,369	563,463	<b>41</b>
140,749	180,524	250,388	289,411	361,672	447,177	<b>42</b>
274,408	372,531	383,518	496,467	669,383	843,056	<b>43</b>
105,338	119,834	125,960	222,323	187,772	240,320	<b>44</b>
74,775	74,727	118,297	165,779	204,267	292,299	<b>45</b>
276,630	331,713	649,631	615,526	773,781	1,335,143	<b>46</b>
37,847	52,894	73,707	112,699	97,862	133,824	<b>47</b>
31,944	58,148	36,103	72,585	136,085	100,214	<b>48</b>
(1)	149,977	(1)	(1)	316,980	(1)	<b>49</b>
941,417	959,515	2,704,978	1,161,782	2,202,050	3,908,991	<b>50</b>
64,236	169,630	59,065	169,050	366,146	203,356	<b>51</b>
415,748	519,988	27,677	1,249,516	2,076,361	110,405	<b>52</b>
3,752,764	3,273,043	1,969,999	8,015,112	9,341,435	4,753,016	<b>53</b>
<b>29,231,838</b>	<b>27,284,638</b>	<b>43,148,702</b>	<b>80,864,273</b>	<b>89,814,764</b>	<b>135,137,547</b>	
1,961,773	1,835,989	4,375,085	5,091,066	6,461,262	12,022,847	<b>54</b>
186,226	137,490	156,350	426,943	504,510	534,324	<b>55</b>
1,758,746	1,752,051	1,975,138	6,987,512	7,638,341	8,495,615	<b>56</b>
1,254,731	1,280,695	1,573,075	7,089,297	8,003,561	11,556,724	<b>57</b>
22,740,920	20,392,245	32,753,754	54,668,255	60,522,151	94,495,222	<b>58</b>
251,270	317,019	99,851	586,179	676,821	431,043	<b>59</b>
153,874	128,126	(11)	831,247	885,055	(11)	<b>60</b>
530,268	265,296	196,241	1,327,056	993,841	1,033,098	<b>61</b>
894,030	1,175,727	2,019,208	3,856,718	4,129,222	6,568,674	<b>62</b>

(9) Included in clay products in 1918 and 1919.

(10) Included in brick and tile in 1917.

(11) Included in dyeing, cleaning and laundry work in 1919.

(12) Included in cement products in 1919.

(13) Included in pig iron in 1919.

(14) Included in smelting in 1919.

(15) Included in plumbing and tinsmithing in 1917 and 1919.

(16) Included in 1919 with railway capital shown on page 533.

(17) Included in 1919 with primary production of minerals.



## 113.—Statistics of Number of Salary-Earning and Wage-Earning Employees, and of Salaries and Wages

No.	Groups and Kinds of Industries.	Employees on Salaries.			Salaries Paid.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
<b>I. Food products.....</b>		<b>9,681</b>	<b>12,036</b>	<b>13,864</b>	<b>10,823,434</b>	<b>14,420,250</b>	<b>17,681,234</b>
1	Baking powder and flavouring extracts.....	187	176	185	271,742	239,620	258,533
2	Beef extract.....	19	42	39	27,197	62,285	62,781
3	Biscuits and confectionery.....	2,086	2,353	1,486	2,143,759	2,983,480	2,318,690
4	Bread and other bakery products.....	1,552	3,317	1,244	535,470	2,268,823	1,462,233
5	Butter and cheese.....	100	85	87	126,987	114,901	2,676,236
6	Chewing gum.....	166	125	146	205,926	218,456	167,350
7	Cocoa and chocolate products.....	235	259	262	440,804	340,421	230,136
8	Coffee and spices.....	83	101	106	115,723	144,510	510,813
9	Condensed milk.....	18	(1)	(1)	22,862	(1)	163,036
10	Confectioners' supplies.....	44	65	53	63,341	96,971	(1)
11	Evaporated fruits and vegetables.....	636	615	679	668,987	699,681	47,030
12	Fish, preserved.....	1,486	1,389	1,431	1,953,695	2,161,030	694,315
13	Flour and gristmill products.....	32	137	188	33,801	227,493	2,431,607
14	Foods, prepared.....	243	250	270	314,325	309,780	299,601
15	Fruit and vegetable canning.....	13	15	21	20,823	21,994	344,926
16	Ice cream cones.....	112	115	180	134,278	168,176	31,630
17	Jams and jellies.....	9	18	27	14,560	22,462	298,981
18	Macaroni and vermicelli.....	7	17	38	7,370	21,282	32,549
19	Maple sugar and syrup.....	(1)	(1)	6	(1)	(1)	35,852
20	Prepared flour.....	34	20	21	69,231	40,117	10,690
21	Rice cleaning and polishing.....	(2)	(2)	79	(2)	(2)	44,003
22	Prepared breakfast food.....	(2)	(2)	9	(2)	(2)	95,089
23	Sausage.....	1,861	2,125	3,187	2,211,683	2,771,852	9,184
24	Slaughtering and meat packing.....	306	310	(3)	402,593	698,264	4,249,084
25	Slaughtering, not including meat packing.....	62	49	89	70,954	62,916	(3)
26	Stock foods.....	275	333	436	487,686	576,489	105,817
27	Sugar, refined.....	—	2	5	—	2,680	883,709
28	Tallow, refined.....	101	111	121	456,106	156,121	6,465
29	Vinegar and pickles.....	17	7	8	23,531	10,446	198,819
30	All other industries.....	7,969	7,569	10,537	11,128,445	11,711,389	12,075
<b>II. Textiles.....</b>		<b>7,969</b>	<b>7,569</b>	<b>10,537</b>	<b>11,128,445</b>	<b>11,711,389</b>	<b>14,946,343</b>
31	Awnings, tents and sails.....	150	155	125	179,027	248,686	207,536
32	Bags, cotton.....	78	128	102	118,234	225,235	184,844
33	Batting.....	9	15	(1)	14,800	20,617	(1)
34	Blankets and sweat pads.....	15	18	(1)	19,082	25,079	(1)
35	Carpets.....	53	43	89	79,399	51,880	147,860
36	Clothing, men's, custom.....	613	374	643	659,555	539,728	965,499
37	Clothing, men's, factory.....	491	1,410	3,533	497,846	2,280,975	2,829,341
38	Clothing, women's, custom.....	1,758	505	564	2,152,032	653,886	731,725
39	Clothing, women's, factory.....	1,244	1,163	1,454	2,613,173	1,887,685	2,720,346
40	Cordage, rope and twine.....	70	73	79	117,443	122,125	145,538
41	Cotton and wool waste.....	12	27	41	20,744	44,650	43,424
42	Cottons.....	298	386	365	502,456	821,281	858,518
43	Embroidery.....	5	12	24	4,602	9,120	30,016
44	Felt goods.....	(1)	12	22	(1)	17,851	27,408
45	Flax, dressed.....	26	43	38	29,843	39,988	55,219
46	Fur goods.....	49	108	123	73,791	109,220	195,072
47	Furnishing goods, men's.....	643	562	667	826,471	885,884	1,266,506
48	Furs, dressed.....	24	16	23	71,550	54,874	51,461
49	Hats, caps and furs.....	896	919	879	1,024,541	1,210,208	1,157,547
50	Hosiery and knitted goods.....	582	724	777	764,952	1,082,832	1,390,394
51	Lace curtains.....	(1)	(1)	15	(1)	(1)	6,515
52	Laces and braids.....	15	22	36	30,131	42,308	75,906
53	Linen.....	29	19	21	34,450	35,470	56,202
54	Mats and rugs.....	12	11	10	12,601	17,381	12,596
55	Neckwear.....	166	213	196	183,253	209,011	344,671
56	Oiled clothing.....	6	6	6	6,300	8,320	10,450
57	Quilted goods.....	10	1	13	13,575	900	24,150
58	Regalia and society emblems.....	9	9	13	9,200	11,108	16,242
59	Shirts, collars and cuffs.....	(4)	5	15	(4)	8,710	26,594
60	Shoddy.....	25	28	36	52,355	75,571	79,151
61	Silk and silk goods.....	154	45	59	224,966	60,671	80,836
62	Textiles, dyeing and finishing.....	29	7	5	20,960	7,822	6,812
63	Thread.....	47	76	75	51,958	91,134	122,936
64	Waterproof clothing.....	80	96	95	117,413	154,718	186,408
65	Wool carding and fulling.....	23	13	11	34,176	28,853	34,107
66	Woollen goods.....	248	269	277	389,237	515,394	633,739
67	Wool pulling.....	3	12	19	2,396	10,808	55,911
68	Woollen yarns.....	25	34	52	29,810	67,386	74,556
69	All other industries.....	72	10	35	155,123	25,074	90,307

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 384 and 385

## Paid in Manufacturing Establishments in Canada, by Individual Industries, 1917, 1918, 1919.

Employees on Wages.			Wages Paid.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
No.	No.	No.	\$	\$	\$	
49,062	52,294	56,334	35,301,754	38,576,094	48,238,536	
449	413	484	241,550	269,052	332,027	1
33	73	58	15,605	29,412	25,452	2
16,241	16,646	{ 10,808	10,960,606	11,186,637	6,798,988	3
3,410	3,988	{ 8,459	4,377,779	3,234,771	8,170,995	4
296	295	4,147	161,566	173,511	4,091,076	5
1,011	1,041	363	397,291	523,662	241,295	6
828	600	1,322	620,362	384,955	925,595	7
502	766	529	417,474	573,353	405,921	8
41	(1)	804	40,429	(1)	699,649	9
692	1,002	(1)	407,137	643,485	(1)	10
5,509	5,095	397	2,808,277	2,866,761	227,771	11
5,428	6,018	4,548	4,339,102	5,394,446	2,749,210	12
112	449	5,970	46,237	288,802	5,651,663	13
2,594	2,694	379	1,047,382	1,291,431	241,823	14
43	54	2,696	26,250	47,176	1,562,073	15
524	541	84	260,339	296,773	78,871	16
95	216	905	87,129	100,909	614,799	17
172	101	207	14,504	50,008	132,617	18
(1)	(1)	74	(1)	(1)	38,006	19
84	67	18	63,057	65,247	9,484	20
(2)	(2)	57	(2)	(2)	54,849	21
19	14	244	14,823	12,710	237,206	22
6,879	7,986	33	5,760,189	7,216,768	30,672	23
1,226	1,395	10,034	1,048,420	1,466,617	11,053,304	24
86	93	(3)	49,984	78,406	(3)	25
2,252	2,225	95	1,837,142	2,050,400	81,345	26
4	11	3,054	4,468	7,985	3,294,185	27
410	461	7	226,423	297,194	6,940	28
32	50	528	28,229	25,623	460,844	29
78,906	79,110	30	42,801,869	46,205,413	21,970	30
667	705	80,475	292,971	385,604	58,451,594	31
624	767	435	382,526	524,739	298,706	32
61	82	799	36,036	55,521	554,878	33
216	221	(1)	106,898	127,800	(1)	34
498	480	(1)	314,131	358,572	(1)	35
5,705	4,944	718	3,300,402	3,204,890	552,641	36
8,599	7,551	5,806	5,281,217	5,279,774	4,658,921	37
4,577	5,405	8,897	2,207,002	2,575,377	8,132,161	38
11,299	9,690	4,514	6,747,794	6,118,561	2,791,223	39
1,130	1,097	9,420	642,004	889,119	9,062,555	40
35	112	940	22,820	77,154	806,614	41
15,053	15,618	108	6,591,856	8,406,062	72,109	42
31	144	15,759	21,586	73,121	10,112,573	43
(1)	98	181	(1)	62,505	134,150	44
278	703	99	101,701	390,353	75,482	45
267	470	638	204,363	426,827	386,023	46
5,245	5,075	505	2,160,867	2,363,875	525,506	47
488	463	5,176	347,296	329,267	2,839,569	48
3,558	3,866	480	2,457,943	2,665,674	321,455	49
11,080	11,903	3,573	5,730,517	6,148,350	2,960,180	50
(1)	(1)	11,607	(1)	(1)	7,014,245	51
152	193	22	72,290	90,773	15,641	52
208	124	292	96,647	68,003	159,933	53
76	76	155	40,104	42,757	89,697	54
547	511	90	253,129	263,675	58,101	55
58	75	502	18,572	30,738	32,369	56
106	91	65	39,417	36,226	71,448	57
23	40	115	12,494	24,084	30,127	58
(4)	295	50	396	126,072	176,264	59
251	225	396	202,450	209,247	186,732	60
824	975	196	392,398	438,695	617,924	61
143	31	54	88,496	20,823	53,461	62
443	546	566	169,489	271,698	117,167	63
428	361	447	283,877	315,935	473,014	64
84	38	51	53,567	35,431	43,425	65
5,208	5,203	5,349	3,404,071	3,246,928	3,900,818	66
12	27	66	8,493	24,486	71,276	67
481	824	932	308,128	454,582	555,585	68
448	81	237	408,316	42,115	156,962	69

113.—Statistics of Number of Salary-Earning and Wage-Earning Employees, and of Salaries and Wages

No.	Groups and Kinds of Industries.	Employees on Salaries.			Salaries Paid.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>III. Iron and steel products.....</b>	<b>7,088</b>	<b>7,082</b>	<b>8,051</b>	<b>9,790,373</b>	<b>11,566,806</b>	<b>13,518,253</b>
1	Boilers and engines.....	932	752	695	1,345,823	1,196,778	1,363,144
2	Bridges, iron and steel.....	586	591	582	861,044	1,041,008	1,021,334
3	Cash carriers and registers.....	32	20	13	40,775	35,846	40,135
4	Castors.....	2	7	3	2,080	7,086	1,450
5	Chains.....	64	83	73	81,577	86,857	91,095
6	Cutlery and edge tools.....	84	29	213	100,829	41,018	272,677
7	Dies and moulds.....	56	69	72	51,143	64,449	69,779
8	Files.....	11	12	18	21,015	26,198	35,182
9	Foundry and machine shop products.....	2,541	2,877	3,626	3,327,981	4,451,282	5,849,529
10	Gas machines.....	27	19	20	38,517	36,276	32,225
11	Hardware.....	8	59	103	3,498	136,104	177,208
12	Hardware, carriage and saddlery.....	74	77	94	114,663	126,286	141,503
13	Horseshoes.....	(6)	29	27	(6)	38,747	36,648
14	Iron and steel products.....	983	339	380	1,267,056	582,898	656,349
15	Iron, pig.....	82	63	83	189,309	210,270	197,703
16	Knitting machines.....	4	(1)	(1)	6,415	(1)	(1)
17	Needles.....	(1)	(1)	14	(1)	(1)	19,970
18	Rolling mills and other furnaces.....	751	1,041	861	1,121,743	1,886,940	1,643,812
19	Safes and vaults.....	43	38	18	67,033	56,008	78,569
20	Saws.....	102	100	103	134,476	153,155	142,440
21	Scales.....	40	41	42	52,572	61,170	62,724
22	Sewing machines and attachments.....	77	79	117	97,260	111,227	121,657
23	Skates.....	3	4	3	3,340	4,049	3,355
24	Stamps and stencils.....	83	62	101	125,703	119,718	178,049
25	Stoves and hot air furnaces.....	27	33	29	35,182	39,280	37,392
26	Structural iron work.....	23	27	39	87,732	49,385	57,976
27	Tools and implements.....	111	214	234	178,397	392,979	399,151
28	Transmission machinery.....	21	(1)	(1)	26,100	(1)	(1)
29	Wire.....	161	194	262	214,178	310,903	429,764
30	Wire fencing.....	121	130	122	183,852	206,350	209,001
31	All other industries.....	39	67	104	61,080	94,539	148,432
	<b>IV. Timber and lumber and their re-manufactures.....</b>	<b>6,823</b>	<b>6,593</b>	<b>8,608</b>	<b>9,689,696</b>	<b>9,835,274</b>	<b>12,734,049</b>
32	Artificial limbs and trusses.....	44	7	53	76,099	10,411	99,576
33	Baskets.....	26	26	37	25,860	30,677	51,281
34	Billiard tables.....	6	9	7	4,180	4,900	7,656
35	Boxes, cigar.....	28	33	17	37,139	39,727	32,318
36	Boxes, wooden.....	509	175	197	752,479	325,715	374,469
37	Clothes pins.....	(1)	7	5	(1)	6,966	6,869
38	Coffins and caskets.....	78	65	77	109,697	109,398	136,302
39	Cooperage.....	70	53	55	64,780	65,628	65,215
40	Corks.....	37	35	27	46,751	55,856	48,931
41	Furniture and upholstered goods.....	828	788	942	969,153	1,021,499	1,447,294
42	Lasts and pegs.....	24	29	30	39,144	45,366	54,337
43	Log products.....	3,159	3,568	5,048	4,781,300	5,373,880	6,976,832
44	Lumber products.....	995	876	1,028	1,412,298	1,155,648	1,500,796
45	Matches.....	29	39	36	40,752	63,347	68,067
46	Picture frames.....	55	18	54	77,878	17,434	95,381
47	Pumps and windmills.....	142	28	112	215,665	41,632	124,040
48	Refrigerators.....	46	29	70	52,986	34,742	101,636
49	Shooks, box.....	19	12	16	13,995	11,950	32,100
50	Showcases.....	72	31	75	91,728	56,647	112,179
51	Wickerware.....	138	28	32	70,772	32,611	51,107
52	Woodenware.....	18	20	(1)	21,236	20,299	(1)
53	Wood pulp.....	373	602	547	631,997	1,152,906	1,114,845
54	Woodworking and turning.....	114	79	113	139,525	102,231	161,517
55	All other industries.....	13	36	30	14,282	55,754	71,301
	<b>V. Leather and its finished products.....</b>	<b>2,717</b>	<b>2,319</b>	<b>2,855</b>	<b>3,735,282</b>	<b>3,372,088</b>	<b>4,751,016</b>
56	Belting and hose leather.....	51	39	53	84,492	65,970	111,241
57	Boots and shoes.....	1,675	1,559	1,831	2,226,313	2,183,325	2,927,037
58	Boot and shoe repairs.....	62	15	29	25,596	9,580	34,866
59	Boot and shoe supplies.....	34	24	41	34,743	41,192	51,757
60	Harness and saddlery.....	399	237	405	463,396	281,286	482,773
61	Leather goods.....	90	118	105	124,420	153,424	200,127
62	Leather, tanned, curried and finished.....	354	290	328	690,066	571,359	823,364
63	Trunks and valises.....	37	37	62	59,086	65,952	116,467
64	All other industries.....	15	-	1	27,170	-	3,384

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 384 and 385.

Paid in Manufacturing Establishments in Canada, by Individual Industries, 1917, 1918, 1919.—con.

Employees on Wages.			Wages Paid.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
No.	No.	No.	\$	\$	\$	
70,071	69,466	56,442	68,947,610	79,076,215	63,439,558	
7,646	7,051	4,903	8,253,379	7,743,433	6,203,319	1
4,895	4,878	1,991	5,538,765	5,815,402	2,434,437	2
87	70	85	111,104	61,706	106,789	3
26	22	35	10,613	10,247	23,419	4
434	438	297	380,419	371,680	308,834	5
491	580	854	350,562	310,208	786,836	6
343	371	366	266,407	311,428	357,448	7
201	234	195	151,992	216,495	209,175	8
21,535	23,586	21,680	18,692,821	24,509,092	23,414,073	9
129	99	123	100,306	88,442	120,727	10
56	843	700	37,179	842,077	680,966	11
1,425	1,166	661	1,271,852	1,435,724	717,773	12
(6)	103	114	(6)	60,302	75,003	13
11,226	3,265	2,691	10,184,693	3,303,346	2,660,380	14
1,241	1,366	1,393	1,590,893	2,085,294	2,140,649	15
45	(1)	(1)	19,191	(1)	(1)	16
(1)	(1)	216	(1)	(1)	145,056	17
15,021	19,006	13,432	18,320,740	25,767,032	16,332,984	18
183	168	267	154,897	162,146	347,867	19
395	362	422	337,073	381,706	401,310	20
390	365	330	337,295	354,329	342,611	21
862	855	1,201	52,995	645,196	940,512	22
13	7	15	10,299	7,349	16,935	23
585	447	594	516,650	551,254	805,589	24
119	152	162	95,948	110,781	143,856	25
78	92	80	69,873	91,315	86,363	26
588	1,713	1,142	416,211	1,840,133	1,283,174	27
58	(1)	(1)	59,870	(1)	(1)	28
868	1,187	1,501	623,788	1,031,290	1,370,022	29
580	489	549	516,111	478,204	564,019	30
551	549	443	475,684	490,604	419,432	31
92,139	87,286	101,215	58,757,260	66,587,955	82,492,121	
112	120	117	69,747	69,636	75,147	32
367	373	396	166,448	175,636	235,561	33
98	19	13	78,773	13,888	11,287	34
394	325	342	147,053	180,974	184,882	35
8,480	2,983	2,720	5,266,701	2,056,251	2,110,476	36
(1)	75	91	(1)	39,116	52,361	37
465	474	622	300,014	353,746	482,573	38
945	722	692	611,152	520,511	591,000	39
209	152	217	101,109	99,798	156,084	40
7,655	7,071	8,110	4,514,622	4,694,473	6,418,753	41
164	204	271	107,267	144,888	218,523	42
54,676	57,300	68,420	34,412,411	44,412,242	54,022,186	43
8,260	7,350	7,984	5,403,190	5,234,435	6,916,228	44
443	548	621	184,965	284,167	367,227	45
342	265	293	245,271	194,149	252,924	46
1,188	338	418	1,053,687	295,680	435,700	47
152	120	465	110,367	106,608	400,959	48
402	135	222	267,730	96,365	189,537	49
199	140	206	169,786	140,356	235,410	50
294	252	333	104,620	168,781	205,393	51
273	199	(1)	136,063	111,086	(1)	52
5,661	6,831	7,282	4,524,191	6,355,928	7,817,887	53
1,304	1,138	1,175	731,402	747,300	961,479	54
56	152	205	50,691	92,941	150,542	55
18,450	19,237	21,678	11,789,029	12,507,227	17,426,647	
83	61	108	57,348	49,089	91,948	56
11,338	12,105	13,144	7,020,431	7,241,772	10,248,437	57
435	918	1,441	260,473	540,387	1,214,531	58
268	250	278	146,472	150,275	195,293	59
1,631	1,635	1,682	1,148,231	1,135,880	1,292,006	60
562	666	659	280,277	369,314	436,140	61
3,774	3,341	3,883	2,670,040	2,893,486	3,579,415	62
325	261	483	177,618	127,024	368,877	63
34	-	-	28,139	-	-	64



## 113. Statistics of Numbers of Salary-Earning and Wage-Earning Employees, and of Salaries and Wages

No.	Groups and Kinds of Industries.	Employees on Salaries.			Salaries Paid.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>VI. Paper and printing.</b>	<b>7,236</b>	<b>7,797</b>	<b>9,547</b>	<b>9,393,948</b>	<b>11,041,001</b>	<b>14,844,110</b>
1	Blue prints.....	26	11	14	29,678	16,147	16,610
2	Boxes and bags, paper.....	384	348	419	622,454	560,558	734,782
3	Fly paper.....	8	6	7	6,602	5,550	7,650
4	Lithographing and engraving.....	383	404	507	561,405	682,254	950,779
5	Maps.....	6	10	4	5,820	10,467	3,300
6	Paper.....	142	202	302	238,974	426,563	561,853
7	Paper board.....	15	(7)	(7)	32,212	(7)	(7)
8	Paper patterns.....	54	49	35	43,909	47,760	35,029
9	Printing and bookbinding.....	1,501	1,370	1,609	1,946,948	2,007,610	2,545,916
10	Printing and publishing.....	3,110	3,772	4,487	3,472,690	4,337,791	5,931,471
11	Stationery goods.....	368	301	354	467,187	462,014	546,142
12	Stereotyping and electrotyping.....	38	34	20	47,462	53,803	23,389
13	Wall paper.....	130	145	208	168,109	269,982	409,849
14	Waxed paper.....	10	15	18	34,439	35,127	50,599
15	Wood pulp and paper.....	1,051	1,125	1,556	1,701,941	2,116,145	3,013,972
16	All other industries.....	10	5	7	14,118	9,225	12,809
	<b>VII. Liquors and beverages.</b>	<b>1,070</b>	<b>949</b>	<b>927</b>	<b>1,696,576</b>	<b>1,619,113</b>	<b>1,484,443</b>
17	Aerated and mineral waters.....	294	257	350	350,047	312,517	437,004
18	Liquors, distilled.....	152	135	51	326,831	342,377	70,169
19	Liquors, malt.....	560	510	450	925,629	896,898	858,557
20	Liquors, vinous.....	38	22	41	57,027	28,591	66,799
21	Malt.....	66	25	35	37,042	38,730	51,914
	<b>VIII. Chemicals and allied products.</b>	<b>2,881</b>	<b>2,850</b>	<b>2,815</b>	<b>4,003,162</b>	<b>4,524,669</b>	<b>4,803,087</b>
22	Ammonia.....	14	14	17	22,316	23,666	24,359
23	Ashes, pot and pearl.....	1	(1)	(1)	500	(1)	(1)
24	Carbide of calcium.....	(1)	69	73	(1)	89,138	118,064
25	Carbonic acid gas.....	16	19	24	20,133	22,932	31,496
26	Disinfectants.....	3	7	4	2,696	6,112	7,092
27	Drugs and chemicals.....	570	356	184	782,666	858,373	367,743
28	Dyes and colours.....	(1)	7	14	(1)	11,065	19,345
29	Explosives.....	186	177	95	364,528	345,395	194,868
30	Fertilizers.....	103	103	92	97,254	132,216	124,593
31	Insect powder.....	12	(1)	1	14,356	(1)	44
32	Oils.....	192	166	76	238,998	185,997	146,555
33	Oxygen gas.....	46	65	79	43,182	73,364	120,176
34	Paints and varnishes.....	667	614	695	1,072,361	921,708	1,264,867
35	Patent medicines.....	548	669	796	673,449	1,034,050	1,293,091
36	Perfumery and cosmetics.....	25	33	25	53,293	62,208	83,251
37	Petroleum.....	226	270	332	263,614	369,705	507,657
38	Salt.....	36	40	49	50,346	69,263	91,834
39	Starch and glucose.....	76	71	82	92,312	98,594	156,994
40	Wood distillation.....	38	29	31	42,315	36,890	39,006
41	Wood preservative.....	(1)	13	(1)	(1)	18,962	(1)
42	All other industries.....	122	128	146	168,843	165,024	212,052
	<b>IX. Clay, glass and stone products.</b>	<b>998</b>	<b>978</b>	<b>1,018</b>	<b>1,385,870</b>	<b>1,493,600</b>	<b>1,792,118</b>
43	Abrasive goods.....	64	101	18	84,963	130,381	36,732
44	Abrasives, artificial.....	(8)	(8)	76	(8)	(8)	117,633
45	Brick tile and pottery.....	205	(9)	(9)	273,113	(9)	(9)
46	Cement, Portland.....	79	76	167	117,002	124,385	325,909
47	Cement products.....	99	46	54	134,708	57,235	46,394
48	Fire clay and fire brick.....	13	(9)	(9)	20,438	(9)	(9)
49	Clay products.....	(10)	259	236	(10)	394,378	437,057
50	Glass.....	93	117	117	168,531	210,512	255,027
51	Glass, stained, cut and ornamental.....	59	43	55	66,357	72,834	90,154
52	Lime.....	54	69	73	60,028	107,287	102,803
53	Mirrors and plate glass.....	82	44	44	110,957	65,408	76,789
54	Monuments and tombstones.....	151	131	(5)	174,130	189,789	(5)
55	Paving blocks.....	4	(1)	(5)	9,270	(1)	(5)
56	Sewer pipe.....	34	(9)	(9)	72,347	(9)	(9)
57	Sand, lime and brick.....	(8)	16	14	(8)	19,827	17,822
58	Stone, artificial.....	2	8	(12)	1,900	8,962	(12)
59	Statuary and art goods.....	5	5	8	5,056	4,938	10,178
60	Stone, monumental, ornamental, etc.....	44	49	156	73,976	88,208	275,620
61	Wall plaster.....	2	10	(5)	5,200	9,378	(5)
62	All other industries.....	8	4	-	7,994	10,077	-

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 384 and 385.

Paid in Manufacturing Establishments in Canada, by Individual Industries, 1917, 1918, 1919—con.

Employees on Wages.			Wages Paid.			No.
1917.	1919.	1919.	1917.	1918.	1919.	
No.	No.	No.	\$	\$	\$	
40,510	40,742	42,142	30,504,946	34,640,392	42,112,540	
44	29	43	28,744	19,795	32,460	1
3,427	3,207	3,447	1,543,915	1,623,929	1,997,736	2
37	17	10	10,561	6,980	6,550	3
2,008	2,086	2,412	1,580,441	1,795,824	2,385,493	4
27	8	22	16,616	4,634	16,833	5
1,561	2,103	2,626	1,017,049	1,624,047	2,126,556	6
302	(7)	(7)	276,907	(7)	(7)	7
102	100	97	43,596	49,691	50,524	8
7,389	7,695	7,921	5,150,974	6,336,032	7,297,536	9
9,692	8,505	9,015	7,521,861	6,587,627	8,913,394	10
1,271	1,377	1,563	736,683	849,229	1,184,781	11
113	116	66	98,843	110,984	83,914	12
263	356	427	146,578	248,821	276,030	13
59	73	80	39,341	57,755	71,527	14
14,153	14,999	14,334	12,236,571	15,298,631	17,629,095	15
62	71	79	56,266	32,413	39,811	16
4,325	4,006	4,326	3,167,655	3,145,442	3,731,562	
1,209	1,148	1,649	786,181	785,433	1,109,128	17
609	444	213	441,799	268,229	109,786	18
2,389	2,241	2,236	1,836,387	1,908,076	2,272,908	19
57	66	105	41,972	64,130	100,663	20
61	107	123	61,316	119,574	139,077	21
14,953	16,541	12,216	12,355,227	17,588,912	12,774,051	
26	28	20	24,880	30,865	29,411	22
2	(1)	(1)	800	(1)	(1)	23
(1)	975	719	(1)	963,029	804,928	24
21	30	30	23,051	36,945	35,925	25
20	9	18	14,194	6,657	19,498	26
3,478	3,936	946	2,324,743	5,014,574	1,099,959	27
(1)	32	31	(1)	13,970	17,387	28
3,228	2,662	629	3,192,697	3,279,447	626,316	29
315	281	276	176,689	237,895	228,985	30
4	(1)	4	1,791	(1)	2,940	31
490	213	235	353,170	186,717	261,739	32
52	125	173	47,665	139,719	189,595	33
1,317	1,382	1,535	882,233	948,637	1,252,130	34
1,252	1,630	1,986	677,973	952,861	1,264,544	35
74	62	99	43,535	29,626	56,978	36
2,620	2,935	3,513	2,626,975	3,449,142	4,694,961	37
257	253	257	180,222	233,009	256,935	38
615	636	648	428,723	541,550	604,647	39
470	647	412	561,732	675,095	355,742	40
(1)	49	(1)	(1)	49,889	(1)	41
712	656	685	694,154	799,285	971,433	42
11,079	9,918	9,795	9,418,414	9,061,712	10,272,443	
741	1,074	84	683,860	1,113,963	72,066	43
(8)	(8)	466	(8)	(8)	651,661	44
2,160	(9)	(9)	2,110,842	(9)	(9)	45
1,420	1,183	1,209	1,314,528	1,287,508	1,510,366	46
1,422	473	265	1,117,347	386,121	267,672	47
133	(9)	(9)	133,884	(9)	(9)	48
(10)	2,368	2,983	(10)	2,111,570	3,004,377	49
2,234	2,215	2,465	1,671,095	2,011,051	2,510,191	50
255	292	362	160,828	111,358	307,716	51
720	782	773	516,487	682,443	697,031	52
190	137	150	146,614	96,072	158,515	53
917	789	(5)	898,447	728,632	(5)	54
31	(1)	(5)	23,957	(1)	(5)	55
423	(9)	(9)	292,942	(9)	(9)	56
(8)	67	149	(8)	62,862	151,206	57
23	76	(12)	17,841	60,675	(12)	58
44	49	67	29,300	32,793	56,974	59
323	358	732	267,256	336,136	884,668	60
23	31	(5)	19,190	25,301	(5)	61
20	24	—	13,996	15,227	—	62

## 113.—Statistics of Number of Salary-Earning and Wage-Earning Employees, and of Salaries and Wages

No.	Groups and Kinds of Industries.	Employees on Salaries.			Salaries Paid.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
	<b>X. Metals and metal products other than iron and steel....</b>	<b>3,407</b>	<b>3,682</b>	<b>4,672</b>	<b>4,681,735</b>	<b>5,578,802</b>	<b>6,551,620</b>
1	Aluminium ware.....	47	74	97	61,048	103,524	125,910
2	Babbitt metal and solder.....	19	24	120	30,509	32,138	150,098
3	Brass castings.....	460	630	465	662,123	965,639	801,754
4	Brass and iron beds.....	43	36	42	38,387	38,240	68,017
5	Coppersmithing.....	(1)	8	6	(1)	5,066	8,508
6	Electroplating.....	33	38	50	35,246	42,225	71,143
7	Engravers' supplies.....	6	6	5	5,710	5,902	6,966
8	Ferro alloys.....	43	50	(13)	67,296	52,970	(13)
9	Gold and silver reducing and refining.....	27	34	(14)	54,524	63,723	(14)
10	Jewellery and repairs.....	338	314	962	359,531	374,254	827,241
11	Lamps and lanterns.....	96	58	61	82,927	101,223	128,208
12	Lightning rods.....	9	27	24	11,271	29,221	39,102
13	Metallic roofing and flooring.....	155	187	267	317,821	341,299	422,161
14	Pins.....	17	11	(1)	21,943	16,165	(1)
15	Plumbers' supplies.....	237	214	217	349,603	326,248	288,977
16	Plumbing and tinsmithing.....	1,265	1,213	1,571	1,346,792	1,537,238	2,053,184
17	Silversmithing.....	96	114	114	137,054	195,982	201,898
18	Stamped enamelware.....	(15)	21	(15)	(15)	26,117	(15)
19	Smelting.....	502	612	637	1,071,168	1,295,918	1,296,374
20	All other industries.....	14	11	34	28,782	25,660	62,019
	<b>XI. Tobacco and its manufactures</b>	<b>1,296</b>	<b>1,039</b>	<b>1,325</b>	<b>1,773,794</b>	<b>1,563,801</b>	<b>2,367,599</b>
21	Tobacco, chewing, smoking and snuff.....	314	121	346	476,021	150,731	752,612
22	Tobacco, cigars and cigarettes.....	982	918	979	1,297,773	1,413,070	1,614,987
	<b>XII. Vehicles for land and air transportation.....</b>	<b>5,737</b>	<b>3,573</b>	<b>4,088</b>	<b>6,351,749</b>	<b>5,247,893</b>	<b>6,679,565</b>
23	Aeroplanes.....	304	(1)	—	223,424	(1)	—
24	Automobiles.....	904	694	937	1,376,692	1,297,338	1,560,633
25	Automobile parts and accessories.....	127	117	355	266,147	271,253	486,297
26	Bicycles.....	109	89	42	92,643	105,814	42,557
27	Car repairs.....	1,338	1,316	1,490	1,487,682	1,728,845	2,631,474
28	Carriages and wagons.....	426	331	244	472,487	409,212	345,488
29	Carriage and wagon materials.....	82	96	71	109,795	161,241	120,960
30	Cars and car works.....	2,447	668	949	2,322,879	919,036	1,492,156
31	All other industries.....	—	262	—	—	355,154	—
	<b>XIII. Vessels for water transportation.....</b>	<b>872</b>	<b>1,403</b>	<b>1,432</b>	<b>998,341</b>	<b>1,923,055</b>	<b>2,615,933</b>
32	Boats and canoes.....	66	46	48	66,376	54,633	79,026
33	Shipbuilding and repairs.....	806	1,357	1,384	931,965	1,868,422	2,537,907
	<b>XIV. Miscellaneous industries.....</b>	<b>13,587</b>	<b>14,836</b>	<b>15,268</b>	<b>16,601,693</b>	<b>20,304,583</b>	<b>21,175,982</b>
34	Agricultural implements.....	1,070	1,129	1,368	1,329,736	1,650,338	1,992,305
35	Ammunition.....	1,703	1,714	63	2,953,093	3,849,039	104,022
36	Artificial leathers and flowers.....	34	39	38	36,197	38,058	50,833
37	Asbestos.....	21	22	30	43,042	41,087	81,122
38	Asphalt.....	34	16	(1)	45,445	20,303	(1)
39	Beekeepers' supplies.....	(1)	1	5	(1)	284	4,684
40	Blacking.....	61	91	107	84,707	160,326	180,549
41	Boiler compound.....	2	9	19	2,760	17,575	32,375
42	Boots and shoes, rubber.....	337	569	583	268,758	610,581	708,494
43	Brooms and brushes.....	132	178	225	167,020	262,435	338,510
44	Buttons.....	69	56	64	79,775	81,266	98,372
45	Celluloid goods.....	(1)	(1)	32	(1)	(1)	27,373
46	China and glass decorating.....	3	2	3	468	442	830
47	Church ornaments.....	—	1	1	—	300	1,200
48	Clocks and watches.....	(1)	31	8	(1)	30,797	15,952
49	Coke.....	45	35	78	62,111	77,780	127,566
50	Combs.....	65	25	19	28,882	21,673	27,424
51	Conduits.....	11	11	12	23,244	25,986	32,422
52	Corsets and supplies.....	241	375	312	197,859	331,770	411,501
53	Cream separators.....	114	109	156	121,045	120,454	475,174
54	Dental supplies.....	25	11	22	33,739	15,692	35,038
55	Electric apparatus and supplies.....	1,521	1,681	2,094	1,962,259	2,304,938	3,092,940
56	Electric light and power.....	3,345	3,973	4,556	3,443,302	4,300,908	5,533,945
57	Elevators.....	103	64	87	148,414	88,050	130,684
58	Elevator repairs.....	67	42	56	81,695	72,480	93,988
59	Enamelware.....	48	43	59	76,734	68,650	84,035
60	Fancy goods.....	70	81	51	89,560	108,109	111,521
61	Fire extinguishers.....	33	9	44	46,923	12,260	54,406
62	Fire works.....	(1)	(1)	7	(1)	(1)	10,628

NOTE.—Figures in parentheses are references to foot notes. For their significance see pages 384 and 385.

Paid in Manufacturing Establishments in Canada, by Individual Industries, 1917, 1918, 1919—con.

Employees on Wages.			Wages Paid.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
No.	No.	No.	\$	\$	\$	
26,280	25,128	24,555	22,735,232	24,810,997	25,929,364	
781	811	764	640,967	740,134	843,697	1
117	63	192	73,182	52,362	248,028	2
3,642	4,103	2,654	3,206,823	3,994,359	2,840,209	3
116	144	182	73,834	115,340	159,896	4
(1)	52	30	(1)	42,075	36,390	5
108	118	196	95,222	105,591	210,444	6
8	10	12	8,485	10,106	13,757	7
654	274	(13)	671,592	449,776	(13)	8
157	127	(14)	147,501	129,770	(14)	9
1,898	1,781	2,501	1,291,157	1,394,599	2,492,517	10
504	289	306	184,343	170,563	206,230	11
29	24	28	22,429	17,792	23,443	12
937	1,058	985	712,766	993,746	954,986	13
102	115	(1)	57,109	67,543	(1)	14
1,550	1,109	740	1,356,663	948,812	781,461	15
9,155	9,409	10,289	6,482,238	7,599,129	9,564,320	16
539	515	581	447,189	434,739	596,423	17
(15)	48	(15)	(15)	35,845	(15)	18
5,799	4,896	4,748	7,095,661	7,343,554	6,653,626	19
184	182	347	168,071	165,162	303,937	20
8,940	9,104	9,354	4,218,041	4,935,329	5,372,536	
2,069	2,125	2,234	950,805	1,010,552	1,195,361	21
6,871	6,979	7,124	3,267,236	3,925,277	4,177,175	22
47,817	39,035	45,953	43,272,215	42,066,775	60,009,352	
1,368	(1)	-	1,717,316	(1)	-	23
5,015	4,668	5,834	4,862,779	5,558,042	8,152,155	24
1,527	1,147	1,378	1,198,596	961,958	1,462,144	25
540	469	321	453,230	444,044	382,276	26
15,982	15,215	21,741	14,287,115	16,948,543	28,995,212	27
3,489	3,022	2,797	2,407,556	2,263,563	2,498,401	28
803	1,034	700	647,969	955,074	696,629	29
19,093	11,071	13,182	17,697,654	12,207,423	17,822,535	30
-	2,408	-	-	2,728,128	-	31
12,289	21,041	23,102	12,886,720	25,186,327	27,925,335	
916	692	784	618,065	704,621	840,465	32
11,370	20,348	22,318	12,268,655	24,481,706	27,084,870	33
94,534	92,385	60,796	74,212,694	88,372,871	55,074,162	
9,562	8,943	9,668	8,012,560	8,618,201	10,125,931	34
37,490	35,046	1,321	33,737,434	42,065,783	986,778	35
291	224	231	150,193	96,174	147,839	36
121	90	84	79,101	59,534	77,774	37
216	108	(1)	195,212	116,154	(1)	38
(1)	6	9	(1)	3,930	9,559	39
198	193	184	103,729	121,949	146,881	40
2	8	8	2,700	6,718	7,535	41
3,661	5,363	5,259	1,916,309	3,218,445	3,834,845	42
887	911	1,075	478,608	585,240	729,653	43
547	616	610	186,314	315,906	447,410	44
(1)	(1)	105	(1)	(1)	110,002	45
7	4	5	4,224	3,276	5,047	46
19	15	12	9,325	8,208	9,259	47
(1)	72	68	(1)	44,219	44,704	48
1,081	1,088	854	1,069,940	1,395,773	1,503,702	49
110	115	144	47,211	53,117	90,062	50
59	42	51	38,036	39,479	41,608	51
1,419	1,449	1,331	503,261	451,183	562,524	52
438	513	337	409,150	399,653	399,235	53
41	38	62	17,851	36,828	63,689	54
8,234	7,178	7,458	6,061,850	6,144,903	6,591,933	55
5,501	5,667	5,205	4,334,413	6,053,334	5,953,187	56
971	385	390	964,482	463,083	554,831	57
144	139	186	168,879	147,336	212,432	58
364	273	447	305,072	263,159	520,484	59
331	353	208	186,618	217,590	138,415	60
83	43	84	60,774	39,071	76,893	61
(1)	(1)	44	(1)	(1)	23,584	62



**113—Statistics of Number of Salary-Earning and Wage-Earning Employees, and of Salaries  
1917, 1918, 1919**

No	Groups and Kinds of Industries.	Employees on Salaries.			Salaries Paid.		
		1917.	1918.	1919.	1917.	1918.	1919.
		No.	No.	No.	\$	\$	\$
<b>XIV. Miscellaneous Industries—concluded.</b>							
1	Flour paste.....	7	6	(1)	8,650	8,830	(1)
2	Fringes, cords and tassels.....	23	21	23	35,618	38,518	52,660
3	Gas, lighting and heating.....	615	569	586	491,753	492,479	563,271
4	Gloves and mittens.....	244	301	373	309,354	485,003	563,701
5	Glue.....	26	49	57	45,514	66,453	81,724
6	Hairwork.....	19	13	8	33,615	14,945	11,826
7	Hay, baled.....	(1)	—	(1)	(1)	—	(1)
8	Ice, manufactured.....	44	38	32	48,202	51,313	53,397
9	Incubators.....	(1)	5	2	(1)	5,148	4,200
10	Inks.....	63	77	104	90,475	142,167	222,445
11	Instruments, mathematical and scientific.....	—	2	6	—	2,916	16,108
12	Jewellery cases.....	9	14	11	9,434	14,695	18,203
13	Labels and tags.....	12	20	12	17,899	32,438	14,734
14	Mattresses and spring beds.....	188	176	196	239,422	249,446	420,520
15	Mica, cut.....	26	21	58	20,714	18,867	42,737
16	Mops.....	4	2	4	2,928	912	3,769
17	Musical instruments.....	297	209	197	415,500	312,360	329,610
18	Musical instrument materials.....	30	35	40	41,082	90,032	109,355
19	Optical goods.....	74	115	131	80,251	146,633	163,695
20	Patterns.....	8	14	15	6,732	21,250	24,230
21	Phonographs and gramophones.....	11	105	242	7,762	127,600	277,077
22	Photography.....	117	97	93	105,494	115,620	121,456
23	Photographic materials.....	(1)	(1)	163	(1)	(1)	225,757
24	Pipe and boiler covering.....	10	3	8	13,711	5,400	15,200
25	Pipes, tobacco.....	2	2	3	832	995	3,306
26	Plaster.....	15	1	32	17,980	300	46,729
27	Plaster products.....	(1)	3	3	(1)	3,618	3,000
28	Printer supplies.....	(1)	(1)	—	(1)	(1)	(1)
29	Pulleys.....	10	8	9	9,496	10,480	11,718
30	Railway supplies.....	13	33	30	23,235	61,532	69,936
31	Roofing and roofing materials.....	206	134	177	246,139	185,104	343,104
32	Rubber and elastic goods.....	1,033	918	1,206	1,173,261	1,147,040	1,510,118
33	Seed cleaning and preparing.....	120	175	200	193,767	241,378	277,645
34	Signs.....	68	51	88	82,293	68,310	147,124
35	Soap.....	288	363	356	433,787	546,672	574,937
36	Spinning wheels.....	(1)	—	—	(1)	—	—
37	Sporting and athletic goods.....	39	15	38	21,109	18,000	44,969
38	Steam boiler packing.....	(1)	(1)	16	(1)	(1)	21,402
39	Surgical appliances.....	(1)	26	16	(1)	34,294	18,421
40	Sweeping compounds.....	10	7	8	15,866	15,857	16,344
41	Toys and games.....	27	33	41	20,067	44,190	62,498
42	Typewriters and supplies.....	20	23	24	38,107	42,926	53,263
43	Umbrellas.....	25	21	36	35,990	31,800	71,579
44	Vacuum cleaners.....	20	12	11	24,127	20,551	19,957
45	Washing compounds.....	13	18	30	16,492	26,435	44,098
46	Washing machines and wringers..	30	34	58	34,992	44,952	66,915
47	Wax candles.....	2	5	3	3,250	5,374	3,100
48	Weather strips.....	8	7	10	7,267	8,041	13,579
49	Whips.....	(1)	28	(1)	(1)	39,476	(1)
50	Window blinds and shades.....	131	132	172	206,510	197,909	223,249
51	Window fixtures.....	11	20	13	15,800	28,857	22,094
52	Not specified.....	57	70	6	43,317	117,242	9,520
53	All other industries.....	458	488	212	577,131	608,644	297,809
<b>XV. Hand Trades</b>							
54	Automobile repairs.....	2,240	2,515	3,309	2,936,948	3,309,750	4,908,650
55	Bicycle repairs.....	302	428	236	334,780	442,490	336,609
56	Blacksmithing.....	9	17	6	6,810	11,786	8,900
57	Dyeing and cleaning and laundry work.....	102	66	87	73,800	71,129	75,887
58	Housebuilding.....	432	554	652	462,424	575,708	834,898
59	Interior decorations.....	1,167	1,209	2,075	1,814,832	1,911,528	3,299,678
60	Laundries, steam.....	28	33	32	28,423	46,958	57,243
61	Lock and gunsmithing.....	30	42	(11)	27,765	37,035	(11)
62	Painting and glazing.....	45	29	22	61,837	48,032	44,593
		125	137	199	126,997	156,084	250,842

(1) Included in all other industries.

(2) Included in flour and grist mill products, 1917 and 1918.

(3) Included in slaughtering and meat packing in 1919.

(4) Included in men's furnishing goods in 1917.

(5) Included in stone, monumental, etc.

(6) Included in iron and steel products in 1917.

(7) Included in paper in 1918 and 1919.

(8) Included in abrasive goods in 1917 and 1918.

and Wages Paid in Manufacturing Establishments in Canada, by Individual Industries,  
—concluded.

Employees on Wages.			Wages Paid.			No.
1917.	1918.	1919.	1917.	1918.	1919.	
No.	No.	No.	\$	\$	\$	
23	23	(1)	11,209	16,363	(1)	1
102	118	143	56,157	58,409	82,256	2
1,138	1,390	1,935	1,112,984	1,382,129	2,119,243	3
2,758	3,529	2,780	1,069,112	1,970,455	1,640,995	4
189	287	290	166,193	228,911	271,517	5
86	89	106	51,530	58,093	85,356	6
(1)	9	(1)	(1)	8,586	(1)	7
190	153	127	154,432	145,124	171,586	8
(1)	26	38	(1)	22,122	30,662	9
146	152	162	111,200	135,290	146,370	10
6	10	15	2,150	9,724	13,872	11
49	65	89	24,913	32,231	50,950	12
135	154	108	60,920	74,309	68,915	13
1,131	1,083	1,246	724,277	924,492	1,231,748	14
882	653	631	136,826	116,295	137,238	15
16	17	18	11,664	12,263	15,381	16
451	2,356	2,427	1,860,017	1,871,144	2,121,873	17
686	652	719	502,774	517,523	568,156	18
328	363	496	174,440	262,026	383,807	19
64	119	100	57,343	41,975	129,904	20
61	455	1,184	53,630	360,325	917,207	21
722	879	951	454,883	447,969	775,392	22
(1)	(1)	718	(1)	(1)	539,345	23
28	22	26	23,895	22,389	33,266	24
6	13	31	9,048	10,905	23,996	25
71	18	337	53,538	14,535	296,698	26
(1)	37	34	(1)	33,325	53,745	27
(1)	(1)	11	(1)	(1)	13,052	28
59	68	58	47,218	58,371	59,653	29
43	106	108	34,658	89,207	102,161	30
689	663	713	532,187	556,022	724,430	31
5,227	3,992	5,628	3,911,605	3,525,460	5,493,910	32
356	365	310	188,710	200,290	198,011	33
326	281	499	245,428	253,987	521,223	34
1,085	1,165	1,131	648,359	1,068,971	884,717	35
(1)	3	2	(1)	1,840	1,883	36
203	193	189	79,369	104,059	128,290	37
(1)	(1)	25	(1)	(1)	20,891	38
(1)	23	26	(1)	14,233	22,988	39
11	14	8	6,815	10,803	7,403	40
121	193	223	49,187	131,817	157,810	41
44	50	57	30,347	36,251	48,224	42
156	135	129	61,331	79,808	75,034	43
22	19	31	20,538	16,228	24,213	44
45	47	49	34,722	29,691	41,471	45
163	174	263	120,263	145,024	231,281	46
19	26	29	9,930	14,108	20,430	47
17	27	23	12,534	22,474	20,081	48
(1)	63	(1)	(1)	50,772	(1)	49
323	290	302	169,059	193,106	224,070	50
76	65	70	42,792	66,460	58,165	51
371	295	27	330,791	260,480	26,379	52
2,142	2,585	734	1,710,470	1,698,251	643,317	53
31,950	37,823	45,731	24,931,157	29,525,409	45,330,812	54
1,542	2,022	3,382	1,200,958	1,853,450	3,395,843	55
153	237	198	121,551	141,626	165,281	56
4,036	4,369	4,414	2,588,207	3,275,969	3,994,016	57
5,229	5,234	6,529	2,962,200	3,089,750	4,425,441	58
17,714	19,898	27,938	16,321,008	18,781,641	30,220,161	59
162	205	125	173,711	142,594	123,358	60
633	655	(11)	350,079	409,582	(11)	61
1,045	443	527	411,998	304,078	408,252	62
1,337	4,760	2,618	801,445	1,526,719	2,598,430	63

(9) Included in clay products in 1918 and 1919.

(10) Included in brick and tile in 1917.

(11) Included in dyeing, cleaning and laundry work in 1919.

(12) Included in cement products in 1919.

(13) Included in pig iron in 1919.

(14) Included in smelting in 1919.

(15) Included in plumbing and tinsmithing in 1917 and 1919.

114.—Statistics of Manufactures by Cities and Towns of 5,000 population and over, 1917-1919.

Cities and Towns.		Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
		No.	\$	No.	\$	\$	\$
<b>P. E. Island—</b>							
Charlottetown.....	1917	62	1,100,823	730	355,497	1,090,525	2,033,085
	1918	61	1,307,506	624	410,954	1,388,636	2,564,004
	1919	84	2,340,341	772	547,172	1,872,827	3,201,061
<b>Nova Scotia—</b>							
Amherst.....	1917	46	9,055,934	2,375	1,787,666	3,320,673	7,251,739
	1918	47	12,205,539	2,255	1,974,727	3,618,118	8,603,535
	1919	57	9,124,425	1,753	1,681,201	4,067,328	8,004,333
Dartmouth.....	1917	42	7,157,769	1,656	1,680,090	9,264,298	12,415,786
	1918	47	8,863,923	1,598	1,393,839	7,359,953	10,569,655
	1919	55	14,010,641	1,838	2,044,727	13,371,856	17,581,851
Halifax.....	1917	245	10,376,410	5,257	3,861,114	6,227,258	15,247,469
	1918	285	17,848,860	8,315	5,639,915	7,130,571	19,339,836
	1919	290	17,721,536	6,721	6,990,740	7,688,749	21,955,162
New Glasgow.....	1917	65	12,240,588	3,156	2,655,438	9,429,973	16,132,835
	1918	69	11,506,872	2,635	2,403,816	9,979,597	14,815,223
	1919	66	6,597,278	1,284	1,218,796	3,555,562	7,347,266
North Sydney.....	1917	19	209,861	135	89,119	81,470	233,443
	1918	23	239,047	177	127,445	90,117	284,370
	1919	24	253,652	234	160,701	130,375	343,830
Springhill.....	1917	15	110,212	45	29,874	30,814	98,393
	1918	16	102,948	74	33,254	33,763	105,585
	1919	15	116,244	54	38,080	33,815	108,141
Sydney.....	1917	91	56,579,071	3,473	3,727,477	32,484,798	75,075,428
	1918	75	104,965,289	3,664	4,698,262	38,626,353	61,474,843
	1919	112	37,136,427	2,673	4,105,317	21,658,373	36,460,254
Sydney Mines.....	1917	13	1,673,171	409	345,913	3,126,626	7,671,198
	1918	15	3,407,013	413	384,584	3,918,536	5,602,175
	1919	15	2,592,434	313	284,201	3,147,959	5,576,778
Truro.....	1917	39	2,746,888	1,067	593,140	1,424,992	3,167,625
	1918	44	2,229,071	1,029	601,280	1,954,011	3,841,129
	1919	63	3,168,443	928	675,441	2,234,929	3,952,165
Yarmouth.....	1917	49	2,526,869	915	467,692	1,367,283	2,180,492
	1918	58	3,470,948	1,188	632,591	2,490,379	4,441,658
	1919	65	3,857,417	1,028	675,479	2,289,391	4,139,268
<b>New Brunswick—</b>							
Fredericton.....	1917	38	4,081,834	1,230	,590,196	1,289,546	3,045,455
	1918	41	7,665,834	1,592	1,163,904	1,419,094	3,310,269
	1919	54	1,469,050	644	534,124	1,525,215	2,525,217
Moncton.....	1917	40	2,452,570	888	460,665	1,093,177	2,132,503
	1918	51	3,499,277	1,194	732,113	1,985,982	3,526,243
	1919	76	7,319,623	3,214	3,348,447	3,253,685	7,526,945
St. John.....	1917	237	24,343,720	5,694	3,432,477	15,297,555	24,630,917
	1918	280	26,787,911	6,504	5,057,189	16,880,922	28,247,037
	1919	307	26,129,347	5,855	5,050,992	27,199,925	40,263,494
<b>Quebec—</b>							
Chicoutimi.....	1917	25	10,171,421	1,361	852,494	1,701,788	4,613,353
	1918	33	11,586,366	1,375	804,995	1,335,029	4,106,962
	1919	39	13,186,344	1,434	1,324,904	1,821,258	4,741,459
Fraserville.....	1917	10	321,157	6	82,337	61,813	176,490
	1918	13	498,539	82	62,688	105,238	216,126
	1919	27	1,590,375	520	476,316	358,316	928,409
Hull.....	1917	45	12,158,510	3,007	2,072,383	6,997,868	13,671,229
	1918	49	11,341,689	3,335	2,431,477	7,687,168	15,139,468
	1919	75	16,896,399	3,494	3,103,467	5,929,711	15,181,622
Joliette.....	1917	42	1,990,679	1,153	497,546	1,359,129	2,560,694
	1918	49	1,890,163	1,004	576,113	1,688,746	3,146,530
	1919	66	2,220,027	1,397	997,763	1,678,436	3,500,241
Lachine.....	1917	39	18,027,071	6,356	7,636,286	15,260,333	32,172,210
	1918	47	18,850,201	4,847	6,222,824	15,359,003	27,156,201
	1919	66	17,686,700	2,794	2,920,343	5,573,153	15,259,700
Levis.....	1917	20	615,506	464	313,205	302,125	909,820
	1918	31	953,430	534	489,407	700,509	1,897,790
	1919	39	914,513	577	480,062	402,305	1,406,770
Montreal.....	1917	2,344	383,357,639	114,434	94,335,047	249,177,506	493,727,250
	1918	2,375	468,401,480	157,878	110,196,219	291,973,466	552,114,600
	1919	2,648	409,908,183	111,089	116,481,019	329,622,471	581,543,590
Quebec.....	1917	407	34,434,131	11,853	8,023,994	16,382,301	34,857,740
	1918	424	35,900,978	11,131	6,980,836	16,119,423	32,754,190
	1919	386	32,829,205	10,420	7,698,636	17,318,116	33,126,500
St. Hyacinthe.....	1917	62	7,035,470	2,124	3,088,527	1,108,833	5,433,900
	1918	64	5,982,781	2,302	1,261,485	5,472,277	8,402,360
	1919	84	6,654,178	2,330	1,522,450	5,300,354	9,965,470

114.—Statistics of Manufactures by Cities and Towns of 5,000 Population and over, 1917-1919  
—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Quebec—concluded.						
St. Johns	1917 38	3,550,843	1,559	833,658	1,052,434	2,794,809
	1918 46	2,646,089	1,927	511,292	1,267,324	2,618,175
	1919 56	4,753,223	1,760	1,290,212	1,244,422	4,826,245
Sorel	1917 41	7,525,145	2,649	1,616,925	1,096,554	3,893,966
	1918 46	4,047,428	1,803	1,463,499	1,353,979	3,808,658
	1919 51	1,974,050	958	625,365	659,289	1,773,863
Shebrooke	1917 120	11,307,354	5,223	3,060,317	4,900,112	11,132,397
	1918 125	13,760,176	6,327	5,241,145	8,632,901	19,967,254
	1919 134	17,329,965	4,455	3,988,712	8,094,700	19,403,771
Thetford Mines.....	1917 29	878,780	134	107,099	147,916	956,492
	1918 30	340,344	117	95,221	199,154	385,950
	1919 42	947,159	188	145,737	319,525	784,401
Three Rivers	1917 89	17,487,050	4,247	2,409,311	4,861,736	11,610,888
	1918 91	20,764,907	5,744	4,158,957	7,636,741	17,706,194
	1919 105	30,207,370	5,743	3,783,793	6,264,615	16,864,578
Valleyfield	1917 42	9,147,223	2,361	1,204,147	2,453,765	6,664,681
	1918 41	9,309,644	2,254	1,455,507	4,024,026	10,569,110
	1919 42	9,227,878	2,313	1,641,098	3,947,588	11,984,411
Verdun	1917 2	8,700	11	4,474	11,384	23,240
	1918 2	165,500	16	19,020	2,413	66,467
	1919 5	676,108	144	155,383	552,987	852,739
Ontario—						
Barrie	1917 51	1,951,250	377	227,145	611,417	1,558,331
	1918 61	1,909,466	332	240,049	855,922	1,414,009
	1919 59	1,749,950	367	345,771	1,507,287	2,330,116
Belleville	1917 75	5,580,564	1,444	1,065,845	1,669,456	4,445,860
	1918 89	7,254,940	1,333	1,231,387	3,021,401	5,855,433
	1919 101	6,663,848	1,196	1,054,427	1,672,972	3,922,488
Brantford	1917 175	37,449,652	8,604	7,071,150	13,495,601	29,111,499
	1918 181	40,724,242	8,288	8,222,396	19,168,364	35,053,226
	1919 197	41,619,630	8,115	8,867,278	17,850,364	35,163,913
Brockville	1917 66	3,867,989	1,376	1,095,998	2,342,988	4,679,957
	1918 66	3,373,877	1,323	1,104,542	2,776,978	6,810,404
	1919 73	5,599,325	1,161	886,023	2,729,395	5,605,244
Chatham	1917 108	12,747,857	2,501	1,938,132	10,038,664	14,159,855
	1918 104	9,193,032	2,624	2,190,994	9,377,577	15,179,426
	1919 117	14,045,204	3,062	2,129,628	13,451,205	18,738,586
Cobalt	1917 31	6,437,265	485	569,346	3,532,543	10,468,341
	1918 38	16,072,125	601	737,477	3,089,323	10,216,324
	1919 35	5,681,001	357	527,351	174,286	7,882,940
Cobourg	1917 42	1,134,994	579	440,242	1,134,096	2,083,015
	1918 42	1,458,032	470	353,942	791,010	1,627,039
	1919 47	1,754,022	471	363,587	1,139,755	2,147,522
Collingwood	1917 34	7,488,457	1,739	1,489,570	1,938,235	5,422,068
	1918 46	5,777,484	1,538	1,603,584	2,884,947	5,895,134
	1919 47	4,087,883	1,145	1,192,442	1,851,507	4,715,297
Cornwall	1917 55	7,899,982	1,757	894,307	2,525,423	5,474,869
	1918 65	7,905,670	1,877	1,132,751	3,691,335	7,803,208
	1919 70	7,538,599	1,973	1,465,491	3,550,575	8,627,344
Fort William	1917 77	7,555,250	1,899	1,558,582	8,368,424	14,695,208
	1918 77	18,217,942	2,456	3,480,785	15,342,633	23,487,689
	1919 87	18,820,791	2,159	2,771,696	9,589,800	15,539,874
Galt	1917 108	11,824,255	4,092	3,400,708	6,162,837	13,710,934
	1918 111	23,334,049	4,252	3,891,825	5,699,331	13,410,433
	1919 123	13,582,891	3,880	3,773,812	6,306,841	13,539,983
Guelph	1917 133	9,550,306	3,485	2,699,119	6,309,148	12,391,917
	1918 129	10,272,367	3,005	2,694,679	6,996,457	13,863,404
	1919 157	12,796,306	3,667	3,470,931	8,492,891	15,450,609
Hamilton	1917 666	141,377,160	31,780	29,691,852	88,900,205	163,506,406
	1918 686	142,336,442	31,116	32,293,012	118,595,728	193,638,400
	1919 746	165,500,399	30,292	32,997,963	80,062,412	149,767,630
Kenora	1917 19	2,869,760	145	144,326	6,331,046	7,644,353
	1918 20	5,144,386	168	177,673	4,913,844	6,036,690
	1919 26	3,393,193	334	382,374	4,641,372	5,777,724
Kingston	1917 107	11,709,810	3,255	4,099,645	5,622,225	11,191,954
	1918 108	13,739,158	3,116	2,633,523	6,215,657	12,149,450
	1919 153	20,900,645	2,671	2,437,850	4,475,012	8,987,481
Kitchener	1917 179	20,346,802	6,512	4,486,502	15,276,827	30,171,284
	1918 172	20,997,159	6,534	5,127,610	14,910,675	30,462,367
	1919 194	26,956,878	7,811	7,183,314	19,865,770	37,385,267
Lindsay	1917 57	3,185,647	1,165	902,866	1,852,287	4,996,704
	1918 52	4,253,161	1,183	875,982	1,967,053	3,913,911
	1919 72	4,551,224	942	782,521	1,624,758	3,644,999



## 114.--Statistics of Manufactures by Cities and Towns of 5,000 Population and over, 1917-1919—continued.

Cities and Towns.		Estab- lish- ments.	Capital.	Em- ployees	Salaries and wages.	Cost of materials.	Value of products.
		No.	\$	No.	\$	\$	\$
<b>Ontario—concluded.</b>							
	1917	393	29,953,419	10,153	7,595,096	17,895,357	34,615,211
London.....	1918	380	34,547,811	10,254	8,702,694	20,505,633	39,104,056
	1919	424	33,921,346	10,710	10,040,406	21,539,082	41,930,921
	1917	101	61,681,147	3,509	3,400,627	5,505,891	19,414,572
Niagara Falls.....	1918	93	51,199,485	3,048	3,275,006	8,013,750	18,406,805
	1919	111	70,013,768	3,743	4,444,077	6,950,272	23,591,110
	1917	37	828,020	691	651,112	800,837	1,651,966
North Bay.....	1918	39	863,279	764	1,186,256	948,027	2,051,579
	1919	52	937,357	970	1,153,602	852,930	2,381,027
	1917	55	4,707,225	1,925	1,694,769	2,174,859	6,022,161
Orillia.....	1918	57	5,672,534	2,062	2,030,220	3,097,527	6,922,541
	1919	60	5,144,876	1,104	1,059,697	1,894,721	4,068,033
	1917	56	10,002,112	3,199	2,860,915	18,221,104	25,252,060
Oshawa.....	1918	56	12,739,486	3,583	3,700,042	18,105,870	30,504,030
	1919	66	10,808,126	3,698	4,196,641	23,759,720	34,442,352
	1917	388	38,698,865	11,873	8,938,176	14,667,832	34,671,203
Ottawa.....	1918	404	37,784,469	12,099	10,604,485	24,069,990	42,279,417
	1919	452	41,546,342	11,383	11,240,252	16,984,269	38,731,298
	1917	99	6,519,695	2,447	1,580,060	2,214,182	5,059,971
Owen Sound.....	1918	94	6,614,849	2,682	2,048,270	2,854,274	7,003,954
	1919	96	7,242,404	2,468	2,227,794	3,093,366	7,419,038
	1917	43	3,442,248	2,116	1,442,652	1,697,937	4,757,708
Pembroke.....	1918	51	3,827,281	1,954	2,126,136	2,507,481	6,020,466
	1919	62	4,297,787	1,642	1,524,207	2,457,807	5,194,850
	1917	127	16,365,589	3,972	3,139,647	11,700,958	21,994,351
Peterborough.....	1918	116	20,322,222	4,513	4,203,123	17,858,747	27,504,683
	1919	158	22,037,123	4,406	3,808,348	20,989,573	30,310,043
	1917	50	8,459,684	1,710	1,843,216	1,794,774	5,657,277
Port Arthur.....	1918	46	12,668,135	2,412	2,770,781	3,558,923	8,133,822
	1919	69	11,036,157	2,663	3,042,738	2,235,003	7,610,427
	1917	43	1,646,660	567	393,687	779,714	1,847,492
Port Hope.....	1918	25	1,676,011	536	460,534	509,171	1,798,928
	1919	51	2,450,403	686	635,338	668,449	1,984,448
	1917	140	16,891,228	6,311	6,146,396	11,586,300	26,455,033
St. Catharines.....	1918	149	17,512,116	5,501	6,437,964	10,221,638	22,610,388
	1919	174	14,837,188	4,180	4,277,569	7,073,518	15,721,125
	1917	90	5,091,093	2,060	1,710,047	5,130,662	7,977,954
St. Thomas.....	1918	103	5,347,809	2,543	2,987,622	7,271,345	12,795,216
	1919	119	7,320,105	2,717	4,106,218	7,155,659	12,782,714
	1917	74	13,243,874	2,641	2,952,666	7,573,762	27,588,859
Sarnia.....	1918	80	21,887,038	2,778	2,848,488	16,536,782	25,547,612
	1919	96	20,842,706	2,555	3,030,174	14,915,559	24,305,545
	1917	77	43,918,282	3,784	4,496,350	14,805,932	34,745,338
Sault Ste. Marie.....	1918	86	69,234,987	4,154	5,361,241	28,781,533	44,556,426
	1919	104	50,692,142	3,204	5,047,499	9,734,302	27,791,991
	1917	49	3,675,702	789	606,064	1,353,482	2,591,624
Smiths Falls.....	1918	47	3,702,439	638	561,625	1,028,380	1,923,030
	1919	60	3,704,175	703	672,310	1,207,680	2,477,029
	1917	101	5,643,929	3,093	2,105,510	4,660,971	8,429,843
Stratford.....	1918	97	6,593,259	3,068	2,408,135	6,516,577	11,171,537
	1919	116	6,157,597	3,390	3,360,911	6,691,650	12,276,927
	1917	2,388	374,872,238	104,480	95,691,124	235,779,057	456,250,198
Toronto.....	1918	2,835	379,492,078	106,248	105,920,198	265,988,540	507,802,722
	1919	3,200	412,449,242	98,945	105,000,426	281,689,830	511,648,448
	1917	68	21,458,989	5,187	5,013,151	12,391,388	27,799,152
Welland.....	1918	84	26,751,880	5,719	7,186,418	17,195,633	37,462,265
	1919	87	25,101,240	3,879	4,622,730	12,167,140	23,397,595
	1917	179	9,901,948	2,870	2,531,124	4,314,854	10,441,736
Windsor.....	1918	162	20,244,130	2,555	2,416,422	4,950,808	11,765,271
	1919	194	14,528,184	3,096	3,624,131	9,067,598	17,087,777
	1917	92	6,561,175	2,178	1,485,909	3,613,048	6,276,568
Woodstock.....	1918	101	6,504,722	1,874	1,415,007	4,230,397	7,202,661
	1919	113	7,117,448	2,003	1,583,610	4,824,568	8,995,390
<b>Manitoba—</b>							
	1917	63	3,865,691	738	660,405	2,386,972	4,615,713
Brandon.....	1918	65	4,224,592	711	718,025	3,611,875	5,346,633
	1919	85	4,704,000	803	1,024,014	3,748,409	5,881,380
	1917	29	1,353,719	393	297,951	1,756,493	2,851,612
St. Boniface.....	1918	30	1,828,946	556	516,442	1,839,342	3,693,128
	1919	44	2,345,526	708	754,068	2,385,551	3,711,413
	1917	676	88,556,837	18,111	15,729,178	58,495,921	98,101,632
Winnipeg.....	1918	779	82,709,029	19,181	18,773,622	77,689,693	118,154,995
	1919	876	80,378,258	23,175	24,122,564	70,155,501	119,836,108

114.—Statistics of Manufactures by Cities and Towns of 5,000 Population and over, 1917-1919  
—concluded.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
<b>Saskatchewan—</b>						
Moosejaw .....	1917 69	8,443,994	1,354	1,151,623	8,201,126	11,889,294
.....	1918 69	9,263,786	1,311	1,479,038	14,884,953	18,186,485
.....	1919 101	5,471,411	1,856	2,135,622	12,781,176	18,005,370
Prince Albert .....	1917 34	1,783,355	1,254	709,605	468,345	1,909,652
.....	1918 33	1,330,213	925	862,875	626,631	2,190,963
.....	1919 44	1,398,152	451	605,423	1,858,832	2,858,207
Regina .....	1917 100	8,393,005	1,489	1,480,036	1,814,775	8,209,939
.....	1918 117	9,490,593	1,573	1,862,494	4,740,395	9,737,737
.....	1919 146	11,308,278	2,017	2,722,005	6,585,931	12,651,063
Saskatoon .....	1917 90	6,574,967	1,323	1,052,672	3,913,495	6,587,632
.....	1918 121	4,936,434	1,230	1,216,895	4,762,315	7,620,799
.....	1919 157	7,069,793	1,640	1,882,307	6,743,410	10,812,765
<b>Alberta—</b>						
Calgary .....	1917 215	27,584,047	3,914	3,736,990	15,282,256	26,342,231
.....	1918 230	29,589,495	4,225	4,572,509	20,550,413	31,811,073
.....	1919 296	30,087,623	4,634	5,563,796	19,562,761	34,002,257
Edmonton .....	1917 204	16,401,548	3,487	2,747,513	11,336,832	18,039,392
.....	1918 213	15,981,916	3,979	3,469,119	17,382,062	26,107,978
.....	1919 201	14,889,801	4,531	4,665,213	17,315,708	31,419,757
Lethbridge .....	1917 50	2,697,041	415	387,166	1,501,402	2,443,986
.....	1918 57	3,273,970	492	515,562	1,500,746	2,799,570
.....	1919 85	3,613,450	604	756,120	1,821,787	3,279,267
Medicine Hat .....	1917 63	6,824,084	990	902,770	8,421,271	11,223,547
.....	1918 57	6,192,399	1,023	1,097,707	10,561,434	14,128,184
.....	1919 71	7,088,575	858	1,106,150	10,464,893	13,127,755
<b>British Columbia—</b>						
Nanaimo .....	1917 47	1,740,762	681	355,654	1,413,198	2,568,956
.....	1918 37	2,043,216	569	588,158	2,364,942	3,314,466
.....	1919 48	1,370,843	315	433,680	709,710	1,598,459
New Westminster .....	1917 74	5,056,331	2,405	1,917,824	2,650,429	5,810,796
.....	1918 67	6,827,580	2,193	2,449,575	4,152,765	7,857,961
.....	1919 85	10,171,162	2,529	3,001,878	6,374,582	11,888,355
North Vancouver .....	1917 12	2,824,963	1,230	1,085,733	1,076,135	3,263,943
.....	1918 12	5,179,191	1,794	2,355,535	2,736,165	6,318,371
.....	1919 26	2,292,923	1,815	2,138,143	3,560,462	8,354,665
Vancouver .....	1917 620	73,728,416	14,435	11,404,329	31,376,999	57,172,309
.....	1918 675	98,434,309	18,733	21,283,962	45,758,443	87,786,041
.....	1919 826	68,784,691	18,161	21,615,652	44,461,716	88,104,138
Victoria .....	1917 225	18,649,048	4,017	2,702,813	4,362,967	10,970,780
.....	1918 213	17,136,214	4,460	3,858,565	6,528,156	14,551,384
.....	1919 270	14,403,419	5,583	7,256,889	9,563,548	23,893,642

115.—Male and Female Employees on Salaries and Wages, by Provinces, 1919.

Provinces.	Employees on Salaries.		Salaries.	Employees on Wages.		Wages.
	Males.	Females.		Males.	Females.	
	No.	No.	\$	No.	No.	\$
Prince Edward Island .....	179	34	156,463	1,074	318	816,843
Nova Scotia .....	1,796	429	2,958,871	22,939	2,941	21,598,234
New Brunswick .....	1,627	520	3,045,668	18,884	3,217	16,198,682
Quebec .....	19,685	6,403	36,539,000	137,979	41,494	153,193,521
Ontario .....	33,501	11,014	67,249,359	225,853	52,974	269,330,209
Manitoba .....	3,314	725	6,384,682	20,389	2,926	24,311,147
Saskatchewan .....	1,313	213	2,210,491	7,374	579	9,226,936
Alberta .....	1,860	382	3,420,999	9,537	1,218	11,765,069
British Columbia .....	4,575	705	8,874,480	41,728	2,663	52,089,792
Yukon .....	11	—	14,989	28	3	50,283
<b>Canada .....</b>	<b>67,861</b>	<b>20,455</b>	<b>130,855,002</b>	<b>485,785</b>	<b>108,333</b>	<b>558,580,707</b>

### WATER POWERS OF CANADA.

By J. B. CHALLIES, C. E., M.E.I.C., Director, Dominion Water Power Branch,  
Department of the Interior, Ottawa.

Prior to the world war the price of fuels was such that ample motive power could be secured through their agency at such reasonable cost that the development of water power only took place where the natural facilities greatly favoured it or where coal costs were relatively high. With the advent of war coal costs soared and supplies became uncertain, whilst power requirements became vastly greater and in consequence greatly stimulated the development of water power. The return of peace has not yet produced any marked amelioration in the coal situation, although the reduction of industrial activity has considerably reduced the power demands.

At the present time any great activity in water power development awaits improvement in financial and industrial conditions, but the general stock-taking throughout the world in regard to water power resources continues and there can be no reasonable doubt that as conditions improve the development of water power will attain even greater proportions.

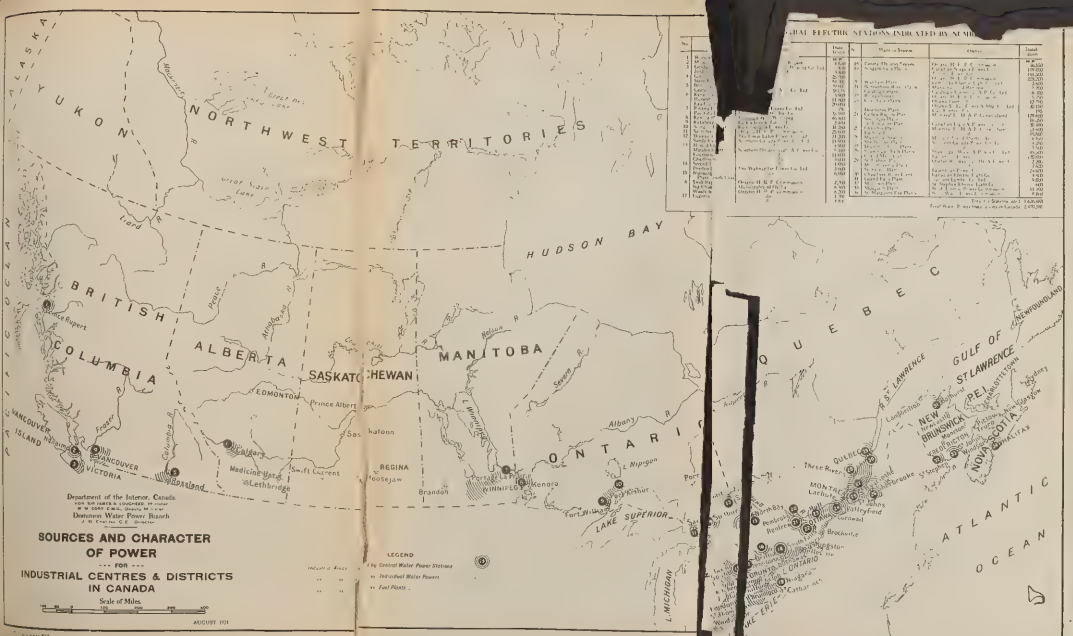
The United States Geological Survey in 1921 issued an Atlas illustrating the water power resources of the world, which it places at 439,000,000 horse power, 43.3 per cent of which are in Africa and 14.1 per cent in North America. The developed water power is estimated at 22,829,000 horse power, more than half of which is on this continent and over 12 per cent in Canada.

In Table 116 are listed the more important water power countries, together with their population and water powers. It is interesting to note that, with the exception of Norway, Canada has the greatest per capita development, and next to the United States, the greatest actual development, whilst its undeveloped resources are proportionately the greatest.

116.—Developed and Available Water Power of leading Countries.

Countries.	Water Power.			
	Population.	Developed.		Available.
		H.P.	Per 1000 population.	H.P. (Minimum).
Sweden.....	5,814,000	1,460,000	251	4,500,000
Norway.....	2,700,000	1,350,000	500	5,500,000
Italy.....	40,000,000	1,150,000	287	3,800,000
Switzerland.....	4,000,000	1,070,000	267	1,400,000
France.....	41,500,000	1,400,000	34	4,700,000
United States.....	105,683,108	9,823,540	93	28,000,000
Canada.....	8,788,483	2,762,880	314	18,255,316

With this brief reference to the water powers of the world we may proceed to a more particular consideration and analysis of those of the Dominion. It has already been shown that Canada is richly endowed with water power resources and is in the forefront as







regards their utilization. In fact, practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within easy transmission distance ample reserves for the future. Over 90% of the prime motive power of the central electric stations of Canada is hydro power. The main-spring of industrial progress in the central provinces, which have no indigenous coal supplies, is water power.

Table 117 shows the distribution of available and developed power in Canada.

117.—Available and Developed Water Power in Canada, March 1, 1922.

Provinces.	Available 24-hr. power at 80% efficiency.		Turbine Installation h.p.
	At ordinary min. flow h.p.	At est. flow for max. dev. (Depend- able for 6 months) h.p.	
British Columbia.....	1,931,142	5,103,460	305,315
Alberta.....	475,281	1,137,505	33,187
Saskatchewan.....	513,481	1,087,756	—
Manitoba.....	3,270,491	5,769,444	104,147
Ontario.....	4,950,300	6,808,190	1,212,650
Quebec.....	6,915,244	11,640,052	1,015,385
New Brunswick.....	50,406	120,807	30,180
Nova Scotia.....	20,751	128,264	46,948
Prince Edward Island.....	3,000	5,270	1,869
Yukon and Northwest Territories.....	125,220	275,250	13,199
<b>Total.....</b>	<b>18,255,316</b>	<b>32,075,998</b>	<b>2,762,880</b>

The figures listed in columns 2 and 3 in the above table represent 24-hr. power and are based upon rapids, falls and power sites of which the actual existent drop or the head possible of concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or lesser power capacity which are not as yet recorded, are scattered on rivers and streams from coast to coast, and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the more unexplored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at such points as definite studies have been carried out and the results made matters of record.

The figures in column 4 represent the actual water wheels installed throughout the Dominion. These figures should not be placed in direct comparison with the available power figures in Columns 2 and 3 for the purpose of deducing therefrom the percentage of the available water power resources developed to date. The actual water wheel installation throughout the Dominion averages 30% greater than corresponding maximum available power figures calculated as in column 3. The figures quoted above therefore indicate that the *at present recorded water power resources* of the Dominion will permit of a turbine installation of 41,700,000 horse power. In

other words, the present turbine installation represents only 6.6 per cent of the present recorded water power resources.

The above figures may be said to represent the *minimum water power possibilities* of the Dominion.

As illustrative of this, the detailed analyses which have been made of the water power resources of the provinces of New Brunswick and Nova Scotia have disclosed most advantageous reservoir facilities for regulating stream flow. It is estimated that the two provinces possess within their respective borders 200,000 and 300,000 commercial horse power. These figures provide for a diversity factor between installed power and consumers' demands.

Table 118 analyses the developed water power and is interesting in that it shows the extent to which the great pulp and paper industry of the Dominion owes its development to water power.

The statistics concerning the central station industry are further analysed in Table 119. The territory served by and the primary power installed in central stations are graphically indicated on the map facing page 390 and the diagram facing page 392. The statistics concerning the pulp and paper industry are analysed in Table 120.

While it was noted at the beginning of this brief summary that water power activity in general awaits improvement in financial and industrial conditions, it should be further noted that in Canada such activity has been very considerable in spite of adverse conditions. During 1921 installations have been made which amount to practically 300,000 horse power, this figure including both new construction and the erection of new turbines and generators in existing water power stations. At the present time there are several new developments in course of construction and there is every indication that for a long time to come the development of water power in Canada will make great and continued progress.

118.—Developed Water Power in Canada, March 1, 1922.

Provinces.	Turbine Installation in H.P.				Per 1000 Population. <sup>5</sup>
	In Central Stations. <sup>1</sup>	In Pulp and Paper Mills <sup>2</sup>	In Other Industries. <sup>3</sup>	Total <sup>4</sup> .	
British Columbia.....	207,656	48,800	48,859	305,315	584
Alberta.....	32,380	—	807	33,187	57
Saskatchewan.....	—	—	—	—	—
Manitoba.....	93,355	—	10,792	104,147	170
Ontario.....	948,372	170,624	93,654	1,212,650	414
Quebec.....	696,593	224,412	94,380	1,015,385	432
New Brunswick.....	8,978	14,668	6,534	30,180	78
Nova Scotia.....	14,992	17,999	13,957	46,948	90
Prince Edward Island.....	245	—	1,624	1,869	21
Yukon.....	10,000	—	3,199	13,199	3,170
<b>Canada.....</b>	<b>2,012,571</b>	<b>476,503</b>	<b>273,806</b>	<b>2,762,880</b>	<b>315</b>

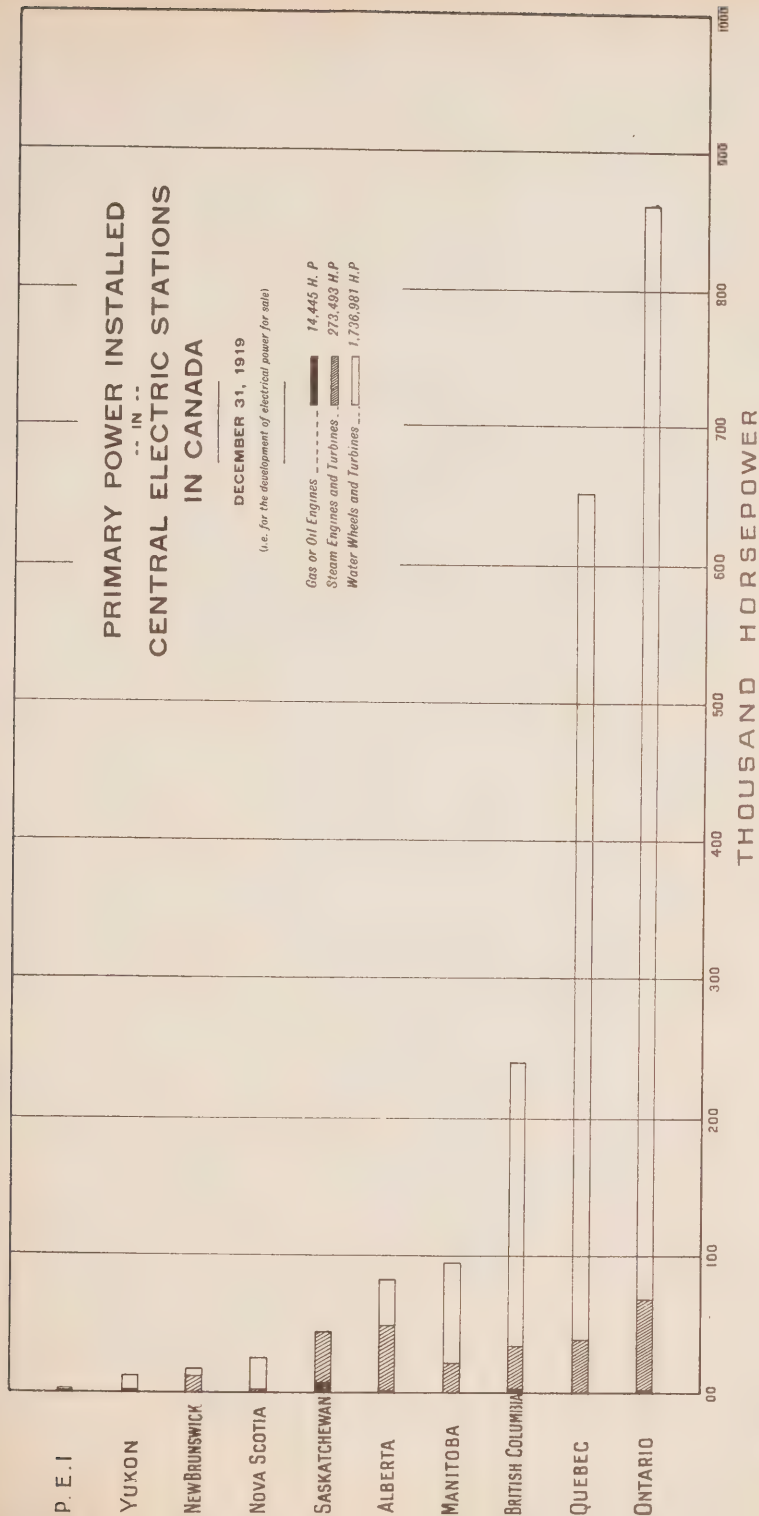
<sup>1</sup>Includes only hydro-electric stations which develop power for sale. <sup>2</sup>Includes only water power actually developed by pulp and paper companies. In addition to this total, pulp and paper companies purchase from the hydro power central stations totalled in column 1, 72,122 h.p. in Ontario and 88,455 h.p. in Quebec. The total hydro power utilized in the pulp and paper industry is therefore 637,080 h.p. <sup>3</sup>Includes only water power actually developed in connection with industries other than the central station and the pulp and paper industries. These industries also purchase blocks of power from the central stations totalled in Column 2. <sup>4</sup>Total of all turbines and water wheels installed in Canada. <sup>5</sup>Average of developed water power per 1000 population.

# PRIMARY POWER INSTALLED -- IN -- CENTRAL ELECTRIC STATIONS IN CANADA

DECEMBER 31, 1919

(i.e. for the development of electrical power for sale)

Gas or Oil Engines 14,445 H. P.  
Steam Engines and Turbines 273,493 H. P.  
Water Wheels and Turbines 1,736,981 H. P.







### 119.—Developed Water Power in Canada Utilized in the Central Electric Station Industry, March 1, 1922.

Provinces.	Commercial Stations.			Municipal Stations.			Total.				
	Installation.			Installation.			Installation.				
	No.	Generator K.V.A.	Turbine H.P.	No.	Generator K.V.A.	Turbine H.P.	No.	Generator K.V.A.	H.P. per turbine Unit.	H.P. per Station.	Total Turbine H.P.
British Columbia.....	22	128,496	197,781	8	6,356	9,875	30	134,852	3,776	6,922	207,656
Alberta.....	3	22,250	32,380	—	—	—	3	22,250	2,491	10,793	32,380
Saskatchewan.....	—	—	—	—	—	—	—	—	—	—	—
Manitoba.....	3	11,063	26,255	1	57,000	67,100	4	68,063	4,913	23,339	93,355
Ontario.....	73	408,823	493,334	44	348,479	455,038	117	757,302	3,248	8,106	948,372
Quebec.....	80	546,316	678,778	15	13,238	17,815	95	559,554	3,210	7,333	696,593
New Brunswick..	7	6,100	8,168	2	476	810	9	6,576	528	998	8,978
Nova Scotia.....	7	1,196	1,583	10	9,684	13,409	17	10,880	750	882	14,992
Prince Edward I.	6	307	245	—	—	—	6	307	35	41	245
Yukon.....	1	6,000	10,000	—	—	—	1	6,000	5,000	10,000	10,000
<b>Canada.....</b>	<b>202</b>	<b>1,130,551</b>	<b>1,418,524</b>	<b>80</b>	<b>435,233</b>	<b>564,017</b>	<b>282</b>	<b>1,565,784</b>	<b>3,077</b>	<b>7,137</b>	<b>2,012,571</b>

Commercial Stations include all privately owned. Municipal Stations include all publicly owned.

Note.—Statistics in this table are based upon a census of the Industry made by the Dominion Bureau of Statistics in co-operation with the Dominion Water Power Branch.

### 120.—Developed Water Power in Canada Utilized in the Pulp and Paper Industry, March 1, 1922.

Provinces.	No. of Mills	Installed and Purchased Power—H.P.				
		Turbine installation in the Industry.			Purchased Hydro- Electric Power. <sup>4</sup>	Total Hydro- Elec. (Col. 4+ Col. 6.) <sup>5</sup>
		Direct drive. <sup>1</sup>	Hydro- Electric drive. <sup>2</sup>	Total <sup>3</sup>		
British Columbia.....	5	27,975	20,825	48,800	—	48,800
Ontario.....	41	89,430	81,194	170,624	72,122	242,746
Quebec.....	54	159,900	64,512	224,412	88,455	312,867
New Brunswick.....	3	2,368	12,300	14,668	—	14,668
Nova Scotia.....	10	17,919	80	17,999	—	17,999
<b>Canada.....</b>	<b>113</b>	<b>297,592</b>	<b>178,911</b>	<b>476,503</b>	<b>160,577</b>	<b>637,080</b>

<sup>1</sup>Includes all turbines actually installed in the industry and directly driving mill equipment.

<sup>2</sup>Includes all turbines actually installed in the industry and transmitting power through electric drive.

<sup>3</sup>Total of the turbine capacity actually installed in the industry.

<sup>4</sup>Includes only power purchased from hydro-electric central stations for the operation of pulp and paper mills.

<sup>5</sup>Total of the hydro-electric power used in the industry.

## IX.—TRADE AND COMMERCE.

**Historical.**—In the early history of the American continent each of the different European nations establishing settlements in the New World endeavoured to monopolize the commerce of its colonies, prohibited the ships of other nations from resorting to them, and prohibited its colonials from importing European goods from other countries, generally granting them, however, preferential treatment in its own market. Under these circumstances the colonial wars in America were carried on, by governments permeated by the mercantile spirit, for “ships, colonies and commerce.” Owing to this fact, wars resulting in the transfer of colonies from one European power to another involved great economic as well as political changes in the community so transferred. The traders who had previously

controlled the trade between the colonial power and its colony found their occupations gone, while new traders from the conquering state arrived to take over the import and export trade, which thereafter flowed in new channels, perhaps no more artificial than those which had previously existed.

Throughout the earlier part of the French *régime* in Canada the foreign trade of the colony was in the hands of the monopolistic chartered companies, of which the Company of One Hundred Associates was the most notable. When its monopoly was cancelled in 1663, the foreign trade of Canada still remained a preserve of the merchants of Old France. Upon the conquest of the country by the British, the French merchants who had their offices in Quebec and Montreal for the most part returned to France, and the trade of the colony fell into the hands of the traders from England, Scotland and New England who had swarmed into the country at the heels of the invading armies. Some of their descendants are still among the leaders of Canadian import and export trade.

For the first half century of British rule, Canadian commerce was carried on almost exclusively with or through the United Kingdom, the merchants of New England complaining, after the American revolution, of being shut out from the Canadian trade. The geographical juxtaposition of the United States to British North America was however, a factor which could not permanently be ignored. Smuggling became more and more prevalent as the process of settlement extended westward along the international boundary. In 1822 Great Britain made considerable trading concessions to United States traders. In 1846 she abolished the preferential treatment which she had given to Canadian wheat and by 1860 all vestige of preference to colonial products had disappeared from the British tariff. As a consequence the colonies, which, like Canada, were by this time enjoying responsible government, could not any longer be refused the right to control their own commercial policy—a fact which was emphasized in an important report prepared in 1859 by the Minister of Finance, Sir A. T. Galt, and forwarded to the British Government. This report declared that the responsibility of the Canadian Government must be to the Canadian people, more especially in matters of taxation, (the greater part of the revenue being raised by customs duties), and that the Canadian Government must affirm the right of the Canadian Parliament to adjust the taxation of the people in the way it deemed best, even if this should happen to meet with the disapproval of the British Ministry. This doctrine remained unchallenged by the British Government, and coming at a time when all important parties in Great Britain had accepted free trade as a *fait accompli*, it facilitated the setting up of a protective tariff in Canada, designed to secure the establishment in Canada of manufacturing industries at a time when British opinion desired that the colonies should concentrate their attention on the production of food and raw materials, importing from Great Britain the manufactured commodities which they required.

The immediate effect of Confederation was to abolish the tariff barriers which existed between the provinces entering the Dominion. As the area of Canada increased until, except for Newfoundland and Labrador, it became conterminous with British North America, the area of internal free trade was thereby extended, while protection against outside competition was maintained. The tariff was the same against all countries, British or non-British, until 1897, when the British preferential tariff was established in the shape of a remission of a percentage of the duty generally imposed, a method of preference abandoned in 1904 for a specially low rate of duty on almost all imported dutiable commodities. In 1907 an intermediate tariff was established for use as a basis of negotiation with foreign countries in the interests of Canadian trade, the list of countries whose goods are entitled to special treatment being in 1922 as follows: France, her colonies and protectorates, Belgium, Italy and the Netherlands (all these under special Treaties); Argentine Republic, Colombia, Denmark, Japan, Norway, Russia, Spain, Sweden, Switzerland and Venezuela (under reciprocal most favoured nation clause treatment). The general tariff is in force with respect to the products of all other foreign countries. There is also in the Canadian customs tariff an anti-dumping clause, providing that in the case of imported articles of a kind made or produced in Canada, if the export or selling price to the Canadian importer is less than the fair market value in the country whence imported, there shall be levied, in addition to the duties otherwise payable, a special duty according to the difference between the selling price for export and the fair market value for home consumption, but such special duty shall not exceed 15 p.c. *ad valorem*, nor be levied on goods when the normal duties are 50 p.c. *ad valorem*, nor on goods subject to excise duty.

Drawbacks of 99 p.c. of duties paid on imported materials are allowed by the customs laws and regulations in cases where articles manufactured from such materials are afterwards exported.

**Trade Statistics.**—In the consideration of the foreign trade statistics of Canada, the following facts should be borne in mind: First, statistics are given since 1907 for the fiscal years ended March 31. Secondly, imports means always “imports for consumption” and this term does not necessarily imply that the goods have been actually consumed in Canada, but only that they have passed into the possession of the importer; the value given for goods imported is the fair market value thereof when sold for home consumption on the principal markets of the country whence and at the time when the goods were exported to Canada. Thirdly, the term “Canadian produce” includes all imported articles which have been changed in form or enhanced in value by further manufacture in Canada, such as sugar refined in Canada from imported raw sugar, flour ground from imported wheat, and articles constructed or manufactured from imported materials; the value of “Canadian produce” is its value at the time of exportation at the Canadian ports from which it is shipped. Fourthly, the term “foreign produce”



applies to the exports of foreign goods which had previously been imported (re-exports); the value of "foreign produce" is the actual cost of the goods.

A general view of the aggregate trade of Canada for the years from 1868 to 1922 is furnished in Table 1, giving the imports of merchandise for home consumption, dutiable and free, and the exports of Canadian and foreign produce, the total trade as here given being the aggregate of the two. Necessarily, difficulties have been met with in maintaining comparable statistics through such a length of time, one of the most serious of these arising through different methods adopted in dealing with exports of foreign produce. The shrinkage in the exports of foreign produce between 1919 and 1922 for example has been due to change of statistical method rather than to actual diminution in value or volume of such goods exported. For the past two years re-exports of foreign products from bonded warehouses have no longer been included in Canadian trade statistics either as imports or as exports, while the exports of foreign produce have during this period been composed of goods which had previously been entered as imports for home consumption. Such goods, therefore, are shown as debited to Canada when entering this country and should, therefore, be credited to Canada when re-exported. Consequently, in determining our visible balance of trade in Table 2, it has been necessary to set off the total exports of the past two years against the imports for home consumption. The same table gives the per capita imports for home consumption and exports of Canadian produce since Confederation.

From Table 2 it will be observed that the so-called "balance of trade" has been against Canada (i.e., the imports for home consumption have exceeded the exports of Canadian produce) in forty-four years out of the fifty-five years since Confederation, and that this adverse balance reached its highest point in 1913, just before the war. After 1913 the unfavourable trade balance diminished, and in 1916, for the first time since 1898, it gave place to a favourable balance of trade, which continued down to 1920, but was replaced by a comparatively small adverse balance of trade in 1921 and a small favourable balance in 1922. For 1916 the exports of Canadian produce were 146.03 p.c., for 1917, 136.20 p.c., for 1918, 159.99 p.c., for 1919, 132.73 p.c., for 1920, 116.43 p.c., for 1921, 97.60 p.c. and for 1922, 100.82 p.c. of the imports for home consumption, exports of foreign produce having been included with domestic exports for the last two years, for reasons stated above.

The values of coin and bullion imported and exported, these movements from 1914 on representing fiduciary transactions rather than trading exchanges, are shown in Table 3. Amounts collected in export duties from 1868 to 1892, and in import duties from 1868 to 1922 are stated by years in Table 4. Tables 5 and 6 give the statistics of our exports of Canadian produce and our imports for home consumption respectively, figures being furnished of our trade with the United Kingdom, United States and other countries since 1868. These figures show the overwhelming predominance of the two great

English-speaking countries in our foreign trade; in the fiscal year ended March 31, 1922, for example, 80·1 p.c. of our exports of domestic produce was shipped to these two countries, which in the same year together provided 84·7 p.c. of our imports for home consumption. Tables 7 and 8 show respectively by years the percentage proportions of imports from the United Kingdom and the United States to totals of dutiable and free imports since 1901, and the *ad valorem* rates of duty collected on imports from these countries from 1868. The exports of domestic produce to the United Kingdom, the United States and all countries are published, classified according to origin under the new classification of the Dominion Bureau of Statistics, for the four fiscal years 1919 to 1922, in Table 9, while Table 10 is a similarly classified table of imports. Tables 11 and 12 are, as in former years, the great detailed tables of imports and exports, published for the four fiscal years 1919 to 1922. In Tables 13, 14 and 15, the recent foreign trade of Canada is analyzed according to origin, degree of manufacture and purpose for which commodities are used. The course of our recent trade with the West Indies is shown in Tables 16 to 18. Customs duty collected at ports of entry throughout Canada is given in Table 20, imports under our different rates of tariff in Table 21, while our trade is analyzed by countries in Tables 22 to 25. Tables 26 and 27, showing respectively British imports of food commodities and United States exports of such commodities, for the past five years, are added for the purpose of informing our traders concerning the imports of their great customer and the exports of their great competitor.

**Aggregate External Trade.**—The aggregate external trade of Canada for the fiscal year ended Mar. 31, 1922, was valued at \$1,501,-731,341, as compared with \$2,450,587,001 for the preceding fiscal year, a falling off of nearly 40 p.c. This is, on paper, an unprecedented decline, and was doubtless partly a real decrease, due to the depression which prevailed during the latter year. However, the index number of wholesale prices issued by the Department of Labour, averaged for these two twelve-month periods, shows that in the later period the index number was 235·1 as compared with 315·1 in the earlier, a drop of 25·5 p.c. From this it may be inferred that the falling off of 40 p.c. in our trade was to the extent of approximately 25 p.c. due to falling prices and to the extent of approximately 15 p.c. due to declining quantities.

In regard to balance of trade, our exports to the United Kingdom were \$299,361,675 of domestic, plus \$1,001,518 of foreign produce, as compared with imports of \$117,134,576, a favourable visible balance of trade of \$183,228,617, as compared with \$100,255,109 in the preceding year, a result partly attributable to the British coal strike of the summer of 1921. Our visible adverse balance of trade with the United States was in 1922 only \$210,682,930 as compared with \$295,475,684 in 1921, a reduction which is rather significant in view of high protective duties lately levied by the United States against commodities which are to a large extent produced in Canada.

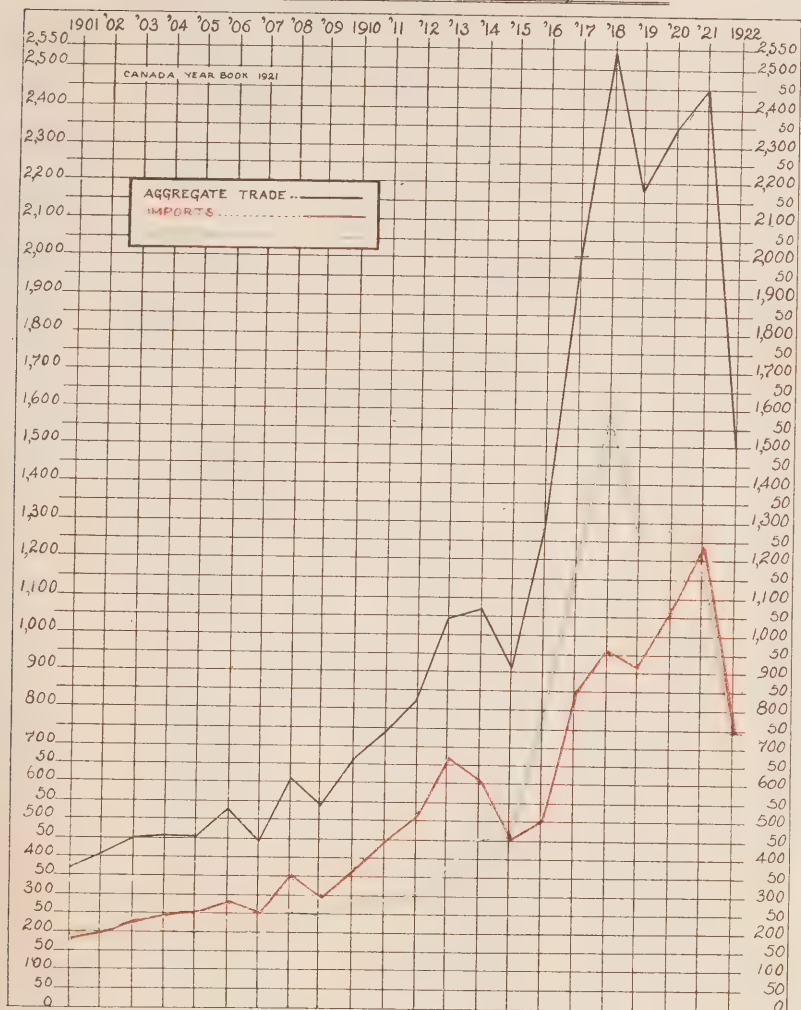
## 1.—Aggregate External Trade of Canada, 1868-1922.

Fiscal Year.	IMPORTS OF MERCHANDISE ENTERED FOR HOME CONSUMPTION.			EXPORTS OF MERCHANDISE.			Total of Imports for Home Consumption and Exports (Merchandise.)
	Dutiable.	Free.	Total.	Canadian Produce. <sup>1</sup>	Foreign Produce.	Total.	
	\$	\$	\$	\$	\$	\$	\$
1868...	43,655,696	23,434,463	67,090,159	48,504,899	4,196,521	52,701,420	119,791,879
1869.....	41,069,312	22,085,599	63,154,911	52,400,772	3,855,801	56,256,573	119,411,314
1870.....	45,127,422	21,774,652	66,902,074	59,043,590	6,527,622	65,571,212	132,473,286
1871.....	60,091,362	24,120,026	84,211,388	57,630,024	9,853,241	67,483,265	151,697,656
1872.....	68,276,157	36,679,210	104,955,367	65,831,053	12,798,182	78,629,265	183,584,632
1873.....	71,198,176	53,310,953	124,509,129	76,538,025	9,105,910	85,643,935	210,453,064
1874.....	76,232,530	46,948,357	123,180,887	76,741,997	10,614,096	87,356,093	210,536,980
1875.....	78,138,511	39,270,057	117,408,568	69,709,823	7,137,319	76,847,142	194,255,710
1876.....	63,238,297	32,274,810	95,513,107	72,491,437	7,234,961	79,726,398	172,239,505
1877.....	60,916,770	33,209,624	94,126,394	68,030,516	7,111,108	75,141,654	169,268,048
1878.....	59,773,039	39,622,812	99,395,851	67,989,800	11,164,878	79,154,678	169,550,529
1879.....	55,426,836	23,275,683	78,702,519	62,431,025	8,355,644	70,786,669	149,489,188
1880.....	54,182,967	15,717,575	69,900,542	72,899,697	13,240,006	86,139,703	156,040,245
1881.....	71,620,725	18,867,604	90,488,329	83,944,701	13,375,117	97,319,818	187,808,147
1882.....	85,757,433	20,387,751	111,145,184	94,137,657	7,628,455	101,766,110	212,911,294
1883.....	91,588,339	35,273,157	121,861,496	87,702,431	9,751,773	97,454,204	219,315,700
1884.....	80,010,498	25,962,480	105,972,978	79,833,098	9,389,106	89,222,204	195,195,182
1885.....	73,269,618	26,486,157	99,755,775	79,131,735	8,079,646	87,211,381	186,967,156
1886.....	70,658,819	25,333,318	95,992,137	77,756,704	7,438,079	85,194,783	181,186,920
1887.....	78,120,679	26,986,531	105,107,210	80,960,909	8,549,333	89,510,242	194,617,452
1888.....	69,645,821	31,025,804	100,671,625	81,382,072	8,803,394	90,185,466	190,857,084
1889.....	74,475,139	34,623,057	109,098,196	80,272,456	6,938,455	87,210,911	196,309,107
1890.....	77,106,286	31,576,287	111,682,573	85,257,586	9,051,781	94,309,367	205,991,940
1891.....	74,536,036	36,997,918	111,533,954	88,671,738	8,798,631	94,470,369	209,004,323
1892.....	69,160,737	45,999,676	115,160,413	99,032,466	13,121,791	112,154,257	227,314,760
1893.....	69,873,571	45,297,259	115,170,830	105,488,798	8,941,856	114,430,654	229,601,484
1894.....	62,779,182	46,291,729	109,070,911	103,851,764	11,833,805	115,685,569	224,756,480
1895.....	58,557,655	42,118,236	100,675,891	102,828,441	6,485,043	109,313,484	209,989,375
1896.....	67,239,759	38,121,402	105,361,161	109,707,805	6,606,738	116,314,543	221,675,704
1897.....	66,220,765	40,397,062	106,617,827	123,632,540	13,425,163	137,057,703	241,075,530
1898.....	74,625,088	51,682,071	126,307,162	144,548,662	14,980,883	159,529,545	285,836,707
1899.....	89,433,172	59,989,244	149,422,416	137,360,792	17,520,088	154,880,880	304,303,296
1900.....	104,346,795	68,304,881	172,651,676	168,972,301	14,265,254	183,237,555	355,889,231
1901.....	105,969,756	71,961,163	177,930,919	177,431,386	17,077,757	194,509,143	372,440,062
1902.....	118,657,496	78,080,308	196,737,804	196,019,763	13,951,101	209,970,864	406,708,668
1903.....	136,796,065	88,298,744	225,094,809	214,401,674	10,828,087	225,229,761	450,324,570
1904.....	148,909,576	94,999,839	243,909,415	198,414,439	12,641,239	211,055,678	454,965,093
1905.....	150,928,787	101,035,427	251,964,214	190,854,946	10,617,115	201,472,061	453,436,273
1906.....	173,046,109	110,694,171	283,740,280	235,483,956	11,173,846	246,657,802	530,398,082
1907.....	152,065,529	98,160,306	250,225,835	180,545,306	11,541,927	192,087,233	442,313,068
1908.....	218,160,047	134,380,832	352,540,879	246,960,968	16,407,984	263,368,952	615,909,831
1909.....	175,014,160	113,580,036	288,594,196	242,603,584	17,318,782	259,922,366	548,516,562
1910.....	227,264,346	143,053,853	370,318,199	279,247,551	19,516,442	298,763,993	669,082,192
1911.....	282,723,812	170,000,791	452,724,603	274,316,553	15,683,657	290,000,210	742,724,813
1912.....	335,304,060	187,100,615	522,404,675	290,223,857	17,492,294	307,716,151	830,120,826
1913.....	441,696,885	229,600,349	671,297,234	355,754,600	21,313,755	377,068,355	1,048,275,589
1914.....	410,258,744	208,935,254	619,193,998	431,588,439	23,848,785	455,437,224	1,074,631,222
1915.....	279,792,195	176,163,713	455,955,908	409,418,836	52,023,673	461,442,509	917,398,417
1916.....	289,366,527	218,834,607	508,201,134	741,610,638	37,689,432	779,300,070	1,287,501,204
1917.....	461,733,609	384,717,269	846,450,878	1,151,375,708	27,835,322	1,179,211,030	2,025,661,978
1918.....	542,341,522	421,191,056	963,532,578	1,540,027,788	46,142,004	1,586,169,792	2,549,702,370
1919.....	526,594,658	393,217,047	919,711,705	1,216,443,806	52,321,479	1,268,765,285	2,188,476,990
1920.....	693,655,165	370,872,958	1,064,528,123	1,239,492,098	47,166,611	1,286,658,709	2,351,186,832
1921.....	847,561,406	392,597,476	1,240,158,882	1,189,163,701	21,264,418	1,210,428,119	2,450,587,001
1922.....	495,620,744	252,183,588	747,804,332	740,240,680	13,686,329	753,927,009	1,501,731,341

<sup>1</sup> Including exports to the United States estimated "short" in the years 1868-1900. <sup>2</sup> Nine months.

# TRADE AND COMMERCE

AGGREGATE EXTERNAL TRADE OF CANADA, 1901-1922.



NOTE.—Figures at the sides of the chart are in millions of dollars. Each vertical line represents one year from 1901 to 1922, and each horizontal line represents \$50,000,000 from zero to \$2,550,000,000.





2.—Ratio of Exports to Imports and Value per capita of Exports, Imports and Total Trade, 1868-1922.

Fiscal Year.	Excess of Imports entered for Consumption over Exports of Canadian Produce.	Excess of Exports of Canadian Produce over Imports entered for Consumption.	Percentage Rate of Exports of Canadian Produce to Imports entered for Consumption.	Estimated Population.	VALUE PER CAPITA OF—		
					Exports Canadian Produce.	Imports.	Total Trade.
	\$	\$	p.c.		\$ cts.	\$ cts.	\$ cts.
1868.....	18,555,260	—	72-30	3,372,000	14-38	19-90	34-28
1869.....	10,754,169	—	82-97	3,413,000	15-35	18-50	33-85
1870.....	7,858,484	—	89-34	3,454,000	17-09	19-37	36-46
1871.....	26,584,364	—	68-43	3,518,000	16-38	23-94	40-32
1872.....	39,124,284	—	62-72	3,611,000	18-23	29-06	47-29
1873.....	47,971,104	—	61-47	3,668,000	20-87	33-94	54-81
1874.....	46,439,890	—	62-30	3,825,000	20-06	32-20	52-26
1875.....	47,698,745	—	59-37	3,887,000	17-93	30-21	48-14
1876.....	20,021,670	—	78-36	3,949,000	18-36	23-43	41-79
1877.....	26,095,848	—	72-28	4,013,000	16-97	23-45	40-42
1878.....	22,406,051	—	75-21	4,079,000	16-67	22-16	38-83
1879.....	16,271,494	—	79-32	4,146,000	15-06	18-98	34-04
1880.....	—	2,999,155	104-29	4,215,000	17-29	16-58	33-87
1881.....	6,543,628	—	92-77	4,337,000	19-36	20-86	40-22
1882.....	17,007,527	—	84-70	4,384,000	21-47	25-35	46-82
1883.....	34,159,065	—	71-97	4,433,000	19-78	27-49	47-27
1884.....	26,139,880	—	75-33	4,485,000	17-80	23-63	41-43
1885.....	20,624,040	—	79-33	4,539,000	17-43	21-98	39-41
1886.....	18,235,433	—	81-00	4,589,000	16-4	20-92	37-86
1887.....	24,146,301	—	77-03	4,638,000	17-46	22-66	40-12
1888.....	19,289,556	—	80-84	4,688,000	17-36	21-47	38-83
1889.....	28,825,740	—	73-58	4,740,000	16-94	23-02	39-96
1890.....	26,424,987	—	76-34	4,793,000	17-79	23-30	41-09
1891.....	22,862,216	—	79-50	4,844,000	18-31	23-02	41-33
1892.....	16,127,947	—	86-00	4,889,000	20-26	23-55	43-81
1893.....	9,682,032	—	91-59	4,936,000	21-37	23-33	44-70
1894.....	5,219,147	—	95-21	4,984,000	20-84	21-88	42-72
1895.....	—	2,152,550	102-14	5,034,000	20-43	20-00	40-43
1896.....	—	4,346,644	104-13	5,086,000	21-57	20-72	42-29
1897.....	—	17,014,713	115-96	5,142,000	24-04	20-73	44-77
1898.....	—	18,241,500	114-44	5,199,000	27-80	24-29	52-09
1899.....	12,061,624	—	91-97	5,259,000	26-12	28-41	54-53
1900.....	3,679,375	—	97-95	5,322,000	31-75	32-44	64-19
1901.....	499,533	—	99-85	5,403,000	32-84	33-13	65-97
1902.....	718,041	—	99-77	5,532,000	35-43	35-56	70-99
1903.....	10,693,135	—	95-37	5,673,000	37-79	39-68	77-47
1904.....	45,494,976	—	81-45	5,825,000	34-06	41-87	75-93
1905.....	61,109,268	—	75-85	5,992,000	31-85	42-05	73-90
1906.....	48,256,324	—	83-13	6,171,000	38-16	45-98	84-14
1907.....	69,680,529	—	72-29	6,302,000	28-65	39-70	68-35
1908.....	105,579,911	—	70-18	6,491,000	38-05	54-31	92-36
1909.....	45,990,612	—	84-17	6,695,000	36-24	43-10	79-34
1910.....	91,070,648	—	75-51	6,917,000	40-37	53-54	93-91
1911.....	178,408,050	—	60-72	7,206,643	38-06	62-82	100-88
1912.....	232,180,818	—	55-66	7,365,205	39-40	70-93	110-33
1913.....	315,452,634	—	53-09	7,527,208	47-26	89-17	136-43
1914.....	187,605,559	—	69-78	7,692,832	56-10	80-49	136-59
1915.....	46,537,072	—	89-89	7,862,078	52-07	57-99	110-06
1916.....	—	233,409,504	146-03	8,035,584	92-29	63-24	155-53
1917.....	—	304,924,890	136-20	8,180,160	140-75	103-48	244-23
1918.....	—	576,495,210	159-99	8,328,382	184-91	115-69	300-60
1919.....	—	296,732,101	132-73	8,478,546	143-47	108-48	251-95
1920.....	—	174,963,975	116-43	8,631,475	143-60	123-33	266-93
1921.....	29,730,763 <sup>1</sup>	—	97-60 <sup>3</sup>	8,788,483	135-31	141-11	276-42
1922.....	—	6,122,677 <sup>2</sup>	100-82 <sup>3</sup>	8,966,834	82-55	83-39	165-94

<sup>1</sup>Nine months.

<sup>2</sup>Excess of imports for home consumption over total exports, or of total exports over imports for home consumption. These amounts represent the true balance of trade, since for the last two years goods shown as foreign exports have previously been entered as imported for home consumption.

<sup>3</sup>Percentage of total exports to imports for home consumption.

## 3.—Movement of Coin and Bullion, 1868-1918.

Fiscal Year.	Total Imports.	Exports.			Total Imports and Exports of Coin and Bullion.
		Canadian.	Foreign.	Total.	
		\$	\$	\$	
1868.....	4,895,147	4,866,168	-	4,866,168	9,761,315
1869.....	4,247,229	4,218,208	-	4,218,208	8,465,437
1870.....	4,335,529	8,002,278	-	8,002,278	12,337,807
1871.....	2,733,094	6,690,350	-	6,690,350	9,423,444
1872.....	2,753,749	4,010,398	-	4,010,398	6,764,147
1873.....	3,005,465	3,845,987	-	3,845,987	6,851,452
1874.....	4,223,282	1,995,835	-	1,995,835	6,219,117
1875.....	2,210,089	1,039,837	-	1,039,837	3,249,926
1876.....	2,220,111	1,240,037	-	1,240,037	3,460,148
1877.....	2,174,089	-	733,739	733,739	2,907,828
1878.....	803,726	-	168,989	168,989	972,715
1879.....	1,639,089	-	704,586	704,586	2,343,675
1880.....	1,881,807	-	1,771,755	1,771,755	3,653,562
1881.....	1,123,275	-	971,005	971,005	2,094,280
1882.....	1,503,743	-	371,093	371,093	1,874,836
1883.....	1,275,523	-	631,600	631,600	1,907,123
1884.....	2,207,666	-	2,184,292	2,184,292	4,391,958
1885.....	2,954,244	-	2,026,980	2,026,980	4,981,224
1886.....	3,610,557	-	56,531	56,531	3,667,088
1887.....	532,218	-	5,569	5,569	537,787
1888.....	2,175,472	-	17,534	17,534	2,193,006
1889.....	575,251	-	1,978,256	1,978,256	2,553,507
1890.....	1,083,011	-	2,439,782	2,439,782	3,522,793
1891.....	1,811,170	129,328	817,599	946,927	2,758,097
1892.....	1,818,530	306,447	1,502,671	1,809,118	3,627,648
1893.....	6,534,200	309,459	3,824,239	4,133,698	10,667,898
1894.....	4,023,072	310,006	1,529,374	1,839,380	5,862,452
1895.....	4,576,620	256,571	4,068,748	4,325,319	8,901,939
1896.....	5,226,319	207,532	4,491,777	4,699,309	9,925,628
1897.....	4,676,194	327,298	3,165,252	3,492,550	8,168,744
1898.....	4,390,844	1,045,723	3,577,415	4,623,138	9,013,982
1899.....	4,629,177	1,101,245	2,914,780	4,016,025	8,645,202
1900.....	8,152,640	1,670,068	6,987,100	8,657,168	16,809,808
1901.....	3,307,069	-	1,978,489	1,978,489	5,285,558
1902.....	6,053,791	-	1,669,422	1,669,422	7,723,213
1903.....	8,695,707	-	619,963	619,963	9,315,670
1904.....	7,554,917	-	2,465,557	2,465,557	10,020,474
1905.....	9,961,340	-	1,844,811	1,844,811	11,806,151
1906.....	6,670,527	-	9,928,828	9,928,828	16,599,355
1907 (9 mos.).....	7,029,047	-	13,189,964	13,189,964	20,219,011
1908.....	5,887,737	-	16,637,654	16,637,654	22,525,391
1909.....	9,611,761	2	1,589,791	1,589,793	11,201,554
1910.....	5,514,817	-	2,594,536	2,594,536	8,109,353
1911.....	9,226,715	-	7,196,155	7,196,155	16,422,870
1912.....	25,077,515	-	7,601,099	7,601,099	32,678,614
1913.....	4,309,811	-	16,163,702	16,163,702	20,473,513
1914.....	14,498,451	1,219	23,559,485	23,560,704	38,059,155
1915.....	131,483,396	667	29,365,701	29,366,368	160,849,764
1916.....	33,876,227	315	103,572,117	103,572,432	137,448,659
1917.....	26,986,548	86,087	196,460,961	196,547,048	223,533,596
1918.....	11,290,341	290,281	3,201,122	3,491,403	14,781,744

NOTE.—Information as to imports and exports of coin and bullion in the fiscal years 1919 to 1922 is not available for publication. Up to 1919 "Silver bullion in bars, blocks, ingots, drops, sheets and plates, unmanufactured," was included in "coin and bullion," but since that time it is regarded as "merchandise." The figures from 1899 of the above table have been revised in accordance with the new arrangement.

**4.—Duties collected on Exports, 1868-1892, and on Imports for Home Consumption, 1868-1922.**

Year.	Duties collected on Exports.	Duties collected on Imports.	Year.	Duties collected on Exports.	Duties collected on Imports.
	\$	\$		\$	\$
1868.....	17,986	8,801,446	1881.....	8,141	18,492,645
1869.....	14,403	8,284,507	1882.....	8,810	21,700,028
1870.....	37,912	9,425,028	1883.....	9,756	23,162,553
1871.....	36,066	11,807,590	1884.....	8,515	20,156,448
1872.....	24,809	13,020,684	1885.....	12,305	19,121,254
1873.....	20,152	12,997,578	1886.....	20,726	19,427,398
1874.....	14,565	14,407,318	1887.....	31,397	22,438,309
1875.....	7,243	15,354,139	1888.....	21,772	22,187,869
1876.....	4,500	12,828,614	1889.....	42,207	23,742,317
1877.....	4,103	12,544,348	1890.....	93,674	23,921,234
1878.....	4,161	12,791,532	1891.....	64,803	23,416,266
1879.....	4,272	12,935,269	1892.....	108	20,550,474
1880.....	8,896	14,129,953			

Year.	Duties collected on Imports.	Year.	Duties collected on Imports.	Year.	Duties collected on Imports.
	\$	\$	\$		\$
1893.....	21,161,711	1903.....	37,110,355	1913.....	115,063,688
1894.....	19,379,822	1904.....	40,954,349	1914.....	107,180,578
1895.....	17,887,269	1905.....	42,024,340	1915.....	79,205,910 <sup>1</sup>
1896.....	20,219,037	1906.....	46,671,101	1916.....	103,940,101 <sup>1</sup>
1897.....	19,891,997	1907 (9 months)...	40,290,172	1917.....	147,631,455 <sup>1</sup>
1898.....	22,157,788	1908.....	58,331,074	1918.....	161,595,629 <sup>1</sup>
1899.....	25,734,229	1909.....	48,059,792	1919.....	158,046,334 <sup>1</sup>
1900.....	28,889,110	1910.....	61,024,239	1920.....	187,524,182 <sup>1</sup>
1901.....	29,106,980	1911.....	73,312,368	1921.....	179,667,683 <sup>1</sup>
1902.....	32,425,532	1912.....	87,576,037	1922.....	121,477,763 <sup>1</sup>

<sup>1</sup>Includes war tax.

NOTE.—Duties on Exports were not collected after the year 1892.



**5.—Exports to the United Kingdom, to the United States and to other Countries  
of Merchandise, the Produce of Canada, 1868-1922.**

Fiscal year.	Exports to United Kingdom.	Per cent Can. Exports to U.K. to total Can. exports. (Mdse.)	Exports to United States.	Per cent Can. Exports to U.S. to total Can. exports. (Mdse.)	Exports to Other Countries.	Total Exports of Canadian Produce.
	\$	p.c.	\$	p.c.	\$	\$
1868.....	17,905,808	36.9	25,349,568	52.3	5,249,523	48,504,899
1869.....	20,486,389	39.1	26,717,656	51.0	5,196,727	52,400,772
1870.....	22,512,991	38.1	30,361,328	51.4	6,169,271	59,043,590
1871.....	21,733,556	37.7	29,164,358	50.6	6,732,110	57,630,024
1872.....	25,223,785	38.3	32,871,496	49.9	7,735,802	65,831,083
1873.....	31,402,234	41.0	36,714,144	48.0	8,421,647	76,538,025
1874.....	35,769,190	46.6	33,195,805	43.3	7,777,002	76,741,997
1875.....	34,199,134	49.1	27,902,748	40.0	7,607,941	69,709,823
1876.....	34,379,005	47.4	30,080,738	41.5	8,031,694	72,491,437
1877.....	35,491,671	52.2	24,326,332	35.8	8,212,543	68,030,546
1878.....	35,861,110	52.7	24,381,009	35.9	7,747,681	67,989,800
1879.....	29,393,424	47.1	25,491,356	40.8	7,546,245	62,431,025
1880.....	35,208,031	48.3	29,566,211	40.6	8,125,455	72,899,697
1881.....	42,637,219	50.8	34,038,431	40.5	7,269,051	83,944,701
1882.....	39,816,813	42.3	45,782,584	48.6	8,538,260	94,137,657
1883.....	39,538,067	45.1	39,513,225	45.1	8,651,139	87,702,431
1884.....	37,410,870	46.9	34,332,641	43.0	8,089,587	79,833,098
1885.....	36,479,051	46.1	35,566,810	44.9	7,085,874	79,131,735
1886.....	36,694,263	47.2	34,284,490	44.1	6,777,951	77,756,704
1887.....	38,714,331	47.8	35,269,922	43.6	6,976,656	80,960,909
1888.....	33,648,284	41.3	40,407,483	49.6	7,326,305	81,382,072
1889.....	33,504,281	41.7	39,519,940	49.2	7,248,235	80,272,456
1890.....	41,499,149	48.7	36,213,279	42.5	7,545,158	85,257,586
1891.....	43,243,784	48.8	37,743,430	42.6	7,684,524	88,671,738
1892.....	54,949,055	55.5	34,666,070	35.0	9,417,341	99,032,466
1893.....	58,409,606	55.4	37,296,110	35.4	9,783,082	105,488,798
1894.....	60,878,056	58.6	32,562,509	31.4	10,411,199	103,851,764
1895.....	57,903,564	56.3	35,603,863	34.6	9,321,014	102,828,441
1896.....	62,717,941	57.2	37,789,481	34.4	9,200,383	109,707,805
1897.....	69,533,852	56.2	43,664,187	35.3	10,434,501	123,632,540
1898.....	93,065,019	64.4	38,989,525	27.0	12,494,118	144,548,662
1899.....	85,113,681	62.0	39,326,485	29.0	12,920,626	137,360,792
1900.....	96,562,875	57.1	57,996,488	34.2	14,412,938	168,972,301
1901.....	92,857,525	52.3	67,983,673	38.3	16,590,188	177,431,386
1902.....	100,347,345	55.8	66,567,784	34.0	20,104,634	196,019,763
1903.....	125,199,980	58.4	67,766,367	31.6	21,435,327	214,401,674
1904.....	110,120,892	55.5	66,856,885	33.7	21,436,662	198,414,439
1905.....	97,114,867	50.9	70,426,765	36.9	23,313,314	190,854,946
1906.....	127,456,465	54.1	83,546,306	35.5	24,481,185	235,483,956
1907.....	98,691,186	54.7	62,180,439	34.4	19,673,681	180,545,306
1908.....	126,194,124	51.1	90,814,871	36.8	29,951,973	246,960,968
1909.....	126,384,724	52.1	85,334,806	35.2	30,884,054	242,603,584
1910.....	139,482,945	50.0	104,199,675	37.3	35,564,931	279,247,551
1911.....	132,156,924	48.2	104,115,823	38.0	38,043,806	274,316,553
1912.....	147,240,413	50.7	102,041,222	35.2	40,942,222	290,223,857
1913.....	170,161,903	47.8	139,725,953	39.3	45,866,744	355,754,600
1914.....	215,253,969	49.9	163,372,825	37.9	52,961,645	431,588,439
1915.....	186,668,554	45.6	173,320,216	42.3	49,430,066	409,418,836
1916.....	451,852,399	60.9	201,106,488	27.1	88,651,751	741,610,638
1917.....	742,147,537	64.5	280,616,330	24.4	128,611,901	1,151,375,768
1918.....	845,480,669	54.9	417,233,287	27.0	277,314,432	1,540,027,788
1919.....	540,750,977	44.5	454,873,170	37.4	220,819,659	1,216,443,806
1920.....	489,152,637	39.5	464,028,183	37.4	286,311,278	1,239,492,098
1921.....	312,844,871	26.3	542,322,967	45.6	333,995,863	1,189,163,701
1922.....	299,361,675	40.4	293,906,643	39.7	146,972,362	740,240,680

<sup>1</sup> Nine months.

**6.—Imports from the United Kingdom, from the United States and from other Countries of Merchandises entered for Home Consumption, 1868-1922.**

Fiscal year.	Imports from United Kingdom.	Per cent Imports from U.K. to Total Imports. (mdse.)	Imports from United States.	Per cent Imports from U.S. to Total Imports. (mdse.)	Imports from Other Countries.	Total Imports for Home consumption.
	\$	p. c.	\$	p. c.	\$	\$
1868.....	37,617,325	56.1	22,660,132	33.8	6,812,702	67,090,159
1869.....	35,496,764	56.2	21,497,380	34.0	6,160,797	63,154,941
1870.....	37,537,095	56.1	21,697,237	32.4	7,667,742	66,902,074
1871.....	48,498,202	57.6	27,185,586	32.3	8,530,600	84,214,388
1872.....	62,209,254	59.7	33,741,995	32.1	9,004,118	104,955,367
1873.....	67,996,945	54.6	45,189,110	36.3	11,323,074	124,509,129
1874.....	61,424,407	49.9	51,706,906	42.0	10,049,574	123,180,887
1875.....	60,009,084	51.1	48,930,358	41.7	8,489,126	117,408,568
1876.....	40,479,253	43.8	44,099,880	47.7	7,933,974	92,513,107
1877.....	39,331,621	41.8	49,376,008	52.5	5,418,765	94,126,394
1878.....	37,252,769	41.2	48,002,875	53.1	5,140,207	90,395,851
1879.....	30,967,778	39.3	42,170,306	53.6	5,564,435	78,702,519
1880.....	33,764,439	48.3	28,193,783	40.3	7,942,320	69,900,542
1881.....	42,885,142	47.4	36,338,701	40.6	11,264,486	90,488,329
1882.....	50,356,268	45.3	47,052,935	42.3	13,735,981	111,145,184
1883.....	51,679,762	42.4	55,147,243	45.3	15,034,491	121,861,496
1884.....	41,925,121	39.6	49,785,888	47.0	14,261,969	105,972,978
1885.....	40,031,448	40.1	45,576,510	45.7	14,147,817	99,755,775
1886.....	39,033,000	40.7	42,818,651	44.6	14,140,486	95,992,137
1887.....	44,741,356	42.6	44,795,908	42.6	15,569,952	105,107,210
1888.....	39,167,644	38.9	46,440,296	46.1	15,063,688	100,671,628
1889.....	42,251,189	38.7	50,029,419	45.9	16,817,588	109,098,196
1890.....	43,277,009	38.8	51,365,661	46.0	17,039,903	111,682,573
1891.....	42,018,943	37.7	52,033,477	46.7	17,481,534	111,533,954
1892.....	41,063,711	35.7	51,742,132	44.9	22,354,570	115,160,413
1893.....	42,529,340	36.9	52,339,796	45.4	20,301,694	115,170,830
1894.....	37,035,963	34.0	50,746,109	46.5	21,288,857	109,070,911
1895.....	31,059,332	30.9	50,179,004	49.8	19,437,555	100,675,891
1896.....	32,824,505	31.2	53,529,390	50.8	19,007,266	105,361,161
1897.....	29,401,188	27.6	57,023,342	53.5	20,193,297	106,617,827
1898.....	32,043,461	25.4	74,824,923	59.2	19,438,778	126,307,162
1899.....	36,966,552	24.7	88,506,881	59.2	23,948,983	149,422,416
1900.....	44,280,041	25.7	102,224,917	59.2	26,146,718	172,651,676
1901.....	42,820,334	24.1	107,377,906	60.3	27,732,679	177,930,919
1902.....	49,022,726	25.0	115,001,533	58.4	32,713,545	196,737,804
1903.....	58,793,038	26.2	129,071,197	57.3	37,230,574	225,094,809
1904.....	61,724,893	25.3	143,329,697	58.7	38,854,825	243,909,415
1905.....	60,342,704	24.0	152,778,576	60.6	38,842,934	251,964,214
1906.....	69,183,915	24.4	169,256,452	59.6	45,299,913	283,740,280
1907.....	64,415,756	25.8	149,085,577	59.5	36,724,502	250,225,835
1908.....	94,417,320	26.8	205,309,803	58.2	52,813,756	352,540,879
1909.....	70,682,600	24.5	170,432,360	59.0	47,479,236	288,594,196
1910.....	95,337,058	25.8	218,004,556	58.9	56,976,585	370,318,199
1911.....	109,934,753	24.3	275,824,265	60.8	66,965,585	452,724,603
1912.....	116,906,360	22.4	331,384,657	63.4	74,113,658	522,404,675
1913.....	138,742,464	20.7	436,887,315	65.0	95,577,275	671,207,234
1914.....	132,070,406	21.4	396,302,138	64.0	90,821,454	619,193,998
1915.....	90,157,204	19.8	297,142,059	65.2	68,656,645	455,955,908
1916.....	77,404,361	15.2	370,880,549	73.0	59,916,224	508,201,134
1917.....	107,096,735	12.7	665,312,759	78.6	74,041,384	846,450,878
1918.....	81,324,283	8.4	792,894,957	82.3	89,313,338	963,532,578
1919.....	73,035,118	8.0	750,203,024	81.6	96,473,563	919,711,705
1920.....	126,362,631	11.9	801,097,318	75.3	137,068,174	1,064,528,123
1921.....	213,973,562	17.3	856,176,820	69.0	170,008,500	1,240,158,882
1922.....	117,134,576	15.7	516,105,107	69.0	114,564,649	747,804,332

<sup>1</sup>Nine months.

**7.—Percentage Proportions of Imports from United Kingdom and United States, respectively, to totals of dutiable and free in the 22 fiscal years 1901-1922.**

Fiscal Year.	UNITED KINGDOM.			UNITED STATES.		
	Dutiable to total dutiable.	Free to total free.	Dutiable and free to total imports.	Dutiable to total dutiable.	Free to total free.	Dutiable and free to total imports.
1901.....	p.c. 29.92	p.c. 15.50	p.c. 24.10	p.c. 50.58	p.c. 74.66	p.c. 60.30
1902.....	29.54	17.94	24.95	50.72	70.11	58.40
1903.....	30.85	18.84	26.15	50.10	68.46	57.29
1904.....	30.18	17.73	25.34	52.07	69.14	58.71
1905.....	29.88	15.14	23.98	52.21	73.13	60.58
1906.....	30.40	15.03	24.42	51.74	71.90	59.59
1907 (9 months).....	32.05	16.04	25.79	51.93	71.28	59.50
1908.....	32.64	17.35	26.83	50.59	70.51	58.16
1909.....	29.84	16.31	24.52	51.76	70.20	59.00
1910.....	31.60	16.49	25.78	52.29	69.22	58.81
1911.....	29.82	15.05	24.34	54.14	72.05	60.84
1912.....	26.69	14.72	22.42	58.72	71.74	63.37
1913.....	24.47	13.43	20.71	62.57	69.78	65.03
1914.....	24.95	14.26	21.35	60.81	70.16	63.96
1915.....	24.31	12.61	19.79	60.27	72.85	65.13
1916.....	17.97	11.63	15.24	68.93	78.29	72.95
1917.....	16.35	8.24	12.67	71.91	86.59	78.57
1918.....	10.70	5.54	8.45	79.16	86.29	82.27
1919.....	9.50	5.90	7.97	79.10	84.74	81.50
1920.....	13.44	8.93	11.87	72.04	81.26	75.25
1921.....	20.07	11.17	17.25	64.19	79.51	69.04
1922.....	19.20	8.72	15.66	62.97	80.88	69.02

NOTE.—For the years 1868 to 1900, see Canada Year Book, 1916-17, pages 403-4.

**8.—Average ad valorem Rates of Duty collected on Imports from United Kingdom, United States, and all Countries in the 55 fiscal years 1868-1922.**

Year.	United Kingdom.		United States.		All Countries.		Year.	United Kingdom.		United States.		All Countries.	
	Average ad valorem rate of duty on							Average ad valorem rate of duty on					
	Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.		Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1868.....	-	-	-	-	20.2	13.1	1896.....	30.2	22.4	26.7	14.5	30.0	19.2
1869.....	16.9	13.5	20.1	7.3	20.2	13.1	1897.....	30.7	21.1	26.7	14.3	30.0	18.7
1870.....	16.8	13.4	19.5	7.8	20.9	14.1	1898.....	29.5	20.8	26.1	13.3	29.7	17.5
1871.....	16.4	13.5	16.3	8.4	19.6	14.0	1899.....	26.6	19.8	26.3	13.2	28.8	17.2
1872.....	16.4	12.7	18.0	7.1	19.1	12.4	1900.....	25.6	18.2	25.0	13.2	27.7	16.7
1873.....	15.6	10.9	17.7	6.5	18.3	10.4	1901.....	24.7	18.3	24.8	12.4	27.5	16.4
1874.....	16.5	12.8	17.4	7.1	18.9	11.7	1902.....	24.0	17.2	25.2	13.2	27.3	16.5
1875.....	18.1	14.8	17.3	7.9	19.6	13.1	1903.....	23.3	16.7	24.9	13.3	27.1	16.5
1876.....	18.8	15.0	19.2	9.3	21.3	13.9	1904.....	24.1	17.6	25.2	13.7	27.5	16.9
1877.....	19.4	16.2	18.7	7.9	20.6	13.3	1905.....	24.8	18.5	26.1	13.5	27.8	16.7
1878.....	20.1	17.3	20.4	9.4	21.4	14.2	1906.....	24.6	18.7	24.8	13.1	27.0	16.5
1879.....	20.5	18.0	23.2	13.1	23.3	16.4	1907 (9 m.).....	24.3	18.4	24.2	12.8	26.5	16.1
1880.....	24.0	20.0	23.1	16.0	26.1	20.2	1908.....	24.2	18.3	24.6	13.3	26.7	16.6
1881.....	24.5	20.5	22.0	15.5	25.8	20.4	1909.....	25.8	19.0	24.9	13.2	27.5	16.7
1882.....	24.1	19.9	21.5	15.0	25.3	19.5	1910.....	25.1	18.9	24.8	13.6	26.8	16.5
1883.....	24.3	19.2	21.1	14.8	25.3	19.0	1911.....	24.6	18.9	24.7	13.8	25.9	16.2
1884.....	24.4	19.1	20.7	14.9	25.2	19.0	1912.....	25.0	19.1	25.0	14.9	26.1	16.8
1885.....	24.8	19.0	21.2	14.5	26.1	19.2	1913.....	25.1	19.6	24.9	15.8	26.1	17.1
1886.....	25.7	20.0	22.8	15.8	27.5	20.2	1914.....	25.2	19.5	24.8	15.6	26.1	17.3
1887.....	26.1	20.8	23.8	16.2	28.7	21.3	1915.....	27.1	20.5	25.1	14.3	27.4	16.8
1888.....	29.1	22.9	26.2	15.3	31.8	22.0	1916.....	28.4	19.1	25.0	13.5	27.2	15.5
1889.....	29.3	22.4	25.4	14.7	31.9	21.8	1917.....	24.9	17.6	22.7	11.4	23.8	13.0
1890.....	28.8	22.1	26.6	15.8	31.0	21.4	1918.....	24.3	17.3	20.5	11.1	21.5	12.1
1891.....	29.0	21.7	26.0	14.9	31.4	21.0	1919.....	22.3	15.3	20.9	11.6	21.5	12.3
1892.....	29.4	22.2	26.5	15.1	29.7	17.8	1920.....	22.1	16.2	22.5	14.0	22.5	14.7
1893.....	29.8	22.3	26.7	14.6	30.3	18.4	1921.....	20.9	16.6	20.3	12.9	20.6	14.1
1894.....	30.0	22.3	27.0	13.7	30.9	17.8	1922.....	24.8	20.1	23.0	13.9	24.5	16.2
1895.....	30.1	22.6	26.7	13.7	30.5	17.8							

## by values and percentages, 1919-1922.

(According to new Classification.)

VALUES.

[illegible]

PERCENTAGES OF EACH CLASS.

	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Vegetable products (except chemicals, fibres and wood).....	32-05	7-91	23-75	51-05	12-01	33-57	45-18	27-12	40-61	65-58	16-19	42-93							
Animals and their products (except chemicals and fibres).....	23-64	20-68	20-14	28-39	28-23	25-33	29-18	13-97	15-84	23-51	16-46	18-35							
Fibres, textiles and textile products.....	0-27	4-88	2-30	0-79	2-69	2-75	0-85	1-31	1-58	0-34	0-68	0-62							
Wood, wood products, iron and paper.....	2-06	28-01	12-71	8-59	33-12	17-26	11-75	39-83	23-93	5-23	50-38	24-31							
Iron and its products.....	2-09	4-99	6-73	3-25	5-54	6-60	5-64	3-62	6-43	1-59	1-50	3-82							
Non-ferrous metals and their products.....	3-50	11-71	6-52	1-89	8-09	4-43	3-16	5-54	3-86	2-00	5-00	3-77							
Non-metallic minerals and their products (except chemicals).....	0-43	4-34	2-19	0-64	3-77	2-45	1-00	4-11	3-37	1-09	4-29	3-06							
Chemicals and allied products.....	3-73	6-74	4-67	0-73	2-98	1-82	1-03	2-15	1-65	0-31	2-02	1-25							
All other commodities.....	32-23	10-74	20-99	4-67	3-57	5-79	2-21	2-35	2-63	0-35	3-38	1-89							
Total.....	100-00	100-00	100-00	100-00	100-00	100-00	100-00	100-00	100-00	100-00	100-00	100-00	100-00						



10.—Imports from the United Kingdom, from the United States, and from all countries, by classes of Merchandise entered for Home Consumption, by values and percentages, 1919-1922.

(According to new Classification.)

VALUES.

Classes.	1919.				1920.				1921.				1922.			
	United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Vegetable products (except chemicals, fibres and wood).....	2,823,002	103,025,162	157,506,654		17,004,533	142,510,266	242,075,389		38,724,130	121,062,297	261,081,364		27,949,006	85,336,700	173,274,288	
Animal products (except chemicals and fibres).....	990,123	31,066,553	41,505,094		3,789,311	77,010,313	95,098,743		5,148,783	42,911,179	61,722,300		3,092,805	36,118,620	46,645,789	
Fibres, textiles and textile products.....	45,968,360	106,768,458	178,190,241		74,653,042	132,292,083	231,559,877		111,348,051	101,738,045	243,608,342		50,892,567	67,659,112	139,997,137	
Wood, wood products, and paper.....	1,116,407	33,680,584	35,399,852		1,515,780	40,719,024	43,183,267		3,144,574	52,359,847	57,449,384		2,657,020	31,424,411	35,791,487	
Iron and its products.....	6,132,274	185,116,309	192,527,377		6,637,067	178,661,606	186,319,876		16,698,085	226,855,725	245,625,703		8,986,238	99,951,737	110,210,539	
Non-ferrous metals and their products.....	2,035,873	37,938,045	41,649,431		3,339,207	46,868,193	52,103,913		6,680,955	45,864,290	55,553,902		2,523,359	25,327,286	29,753,096	
Non-metallic minerals and their products (except chemicals).....	4,132,824	128,819,978	135,250,417		6,045,566	108,525,324	121,956,176		9,118,403	188,459,045	206,095,113		6,324,790	118,233,478	137,604,140	
Chemicals and allied products.....	3,397,095	28,719,765	34,282,647		4,154,345	23,854,300	29,886,102		6,048,717	26,776,364	36,334,612		3,238,465	17,688,482	24,041,885	
All other commodities.....	6,436,160	94,168,170	103,399,992		8,323,780	50,636,209	62,344,780		17,061,864	50,150,028	72,688,072		11,470,236	34,365,281	50,485,971	
<b>Total.....</b>	<b>73,035,118</b>	<b>750,203,024</b>	<b>919,711,705</b>		<b>126,362,631</b>	<b>801,097,318</b>	<b>1,064,528,123</b>		<b>213,973,562</b>	<b>856,178,820</b>	<b>1,240,158,882</b>		<b>117,134,576</b>	<b>516,105,107</b>	<b>747,804,332</b>	

Consumption, by values and percentages, 1919-1922.—concluded.

(According to new Classification.)

PERCENTAGES OF EACH CLASS.

[illegible]

# 11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
	<b>I. Vegetable Products.</b> (Except Chemicals, Fibres and Wood). Beverages, Distilled and Fermented—				
	Brewed—				
1	Ale, beer and porter..... gal.	—	38,687	253,333	146
	\$	—	34,902	186,620	199
2	Distilled—				
	Gin..... gal.	—	—	2,980	—
	\$	—	—	7,641	—
3	Whiskey..... gal.	2,857	5,899	408,487	272,439
	\$	12,000	20,985	1,178,848	750,078
4	All other spirits, n.o.p..... gal.	25,910	190,205	226,901	787,983
	\$	52,925	507,187	577,726	2,103,945
	Fermented—				
5	Cider..... gal.	3,800	205	6,318	10,482
	\$	1,215	107	2,080	3,720
6	Wines..... gal.	125	74	3,680	420
	\$	188	104	8,008	738
	<b>Total beverages, distilled and fermented..... gal.</b>	<b>32,692</b>	<b>235,003</b>	<b>901,699</b>	<b>1,071,470</b>
	\$	<b>66,328</b>	<b>563,285</b>	<b>1,960,923</b>	<b>2,858,680</b>
7	Fruits, fresh—				
	Apples, green or ripe..... brl.	345,567	23,686	405,058	590,400
	\$	1,806,561	101,014	2,041,076	3,140,269
8	Berries, all kinds..... \$	—	70,314	70,830	—
9	All other fresh fruits, n.o.p..... \$	10	39,720	41,805	4,405
	Dried and preserved—				
10	Apples dried..... lb.	732,935	299,225	1,208,393	1,100,500
	\$	105,149	42,267	166,591	76,167
11	Canned or preserved fruits..... \$	833,651	152,118	1,805,434	1,870,981
12	Fruits, dried, n.o.p..... lb.	15,830	1,495	71,664	60
	\$	2,388	155	7,260	21
	<b>Total fruits..... \$</b>	<b>2,747,759</b>	<b>405,588</b>	<b>4,132,996</b>	<b>5,091,843</b>
	Grains, flours and kindred products—				
	Grains—				
13	Barley..... bush.	2,260,395	165,380	3,505,497	12,686,866
	\$	3,394,384	283,453	5,289,780	18,138,354
14	Beans..... bush.	100	57,637	58,049	1,074
	\$	617	222,497	225,186	4,680
15	Buckwheat..... bush.	—	391,962	394,962	—
	\$	—	632,085	632,085	—
16	Corn, Indian..... bush.	—	7,333	9,266	131
	\$	—	9,546	14,265	259
17	Oats..... bush.	8,497,888	767,889	17,879,783	3,610,792
	\$	7,360,011	647,408	15,193,527	3,300,477
18	Peas, split..... bush.	980	12,335	28,845	2,193
	\$	4,200	47,695	130,157	8,160
19	Peas, whole..... bush.	60,813	145,243	249,233	60,730
	\$	372,696	628,543	1,202,837	210,678
20	Rice..... lb.	600	65,338	1,098,210	—
	\$	75	6,530	87,800	—
21	Rye..... bush.	17,999	387,070	463,380	947,480
	\$	34,929	828,289	962,742	1,644,138
22	Wheat..... bush.	37,317,648	1,992,409	41,808,897	51,426,131
	\$	86,776,303	4,203,920	96,985,056	122,108,193
	<b>Total grains..... \$</b>	<b>97,943,215</b>	<b>7,509,966</b>	<b>120,723,435</b>	<b>145,414,939</b>
	Flour and milled products—				
23	Bran, shorts and middlings..... cwt.	—	—	—	540
	\$	32,854	1,461,021	1,592,212	1,170
24	Cornmeal..... brl.	2,274	2,775	7,828	42,773
	\$	17,777	22,340	65,281	372,364
25	Malt..... bush.	—	6,664	721,346	—
	\$	—	16,900	1,687,214	—
26	Oatmeal and rolled oats..... cwt.	443,111	23,381	761,520	694,112
	\$	2,368,347	125,747	4,032,567	3,717,224
27	Rice meal and rice flour..... lb.	—	1,030,240	1,279,145	695,200
	\$	—	7,764	86,538	42,134

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
2,475 798	209,113 145,077	102 86	51 125	793,172 912,964	3,000 4,080	312,550 687,467	472,735 849,285	1
—	2,422	—	265	972	—	—	4	2
—	7,682	—	1,392	3,459	—	—	15	3
1,286	463,949	134,711	1,616	370,918	84,155	20,228	193,773	4
5,374	1,504,132	374,662	17,025	1,697,158	193,270	235,183	925,895	5
334,832	1,374,282	14,843	220,464	529,124	13,439	163	24,036	6
664,021	2,964,959	19,267	374,565	587,277	17,684	3,166	35,805	7
24,672	40,256	—	61,787	72,544	11,737	118,404	131,431	8
36,906	43,334	—	46,175	52,565	3,871	66,489	71,194	9
—	6,914	386	4	2,441	—	87	2,100	10
—	18,087	812	51	6,774	—	177	3,658	11
363,265 707,099	2,096,936 4,683,271	150,042 394,827	284,187 439,333	1,771,658 3,260,197	112,331 201,221	451,432 992,476	824,079 1,861,443	12
236,000	873,882	1,272,533	48,107	1,358,499	1,315,938	486,445	1,845,955	13
856,760	4,242,219	7,902,013	171,226	8,299,099	6,244,209	2,381,419	8,854,379	14
228,342	229,656	—	376,661	377,230	—	314,852	513,025	15
134,186	142,719	7,464	554,611	570,252	73,748	499,822	579,118	16
1,273,939	3,977,306	1,112,885	125,756	2,066,999	1,109,360	840,874	4,357,932	17
167,445	514,727	188,774	15,245	315,372	116,907	91,772	535,995	18
168,105	3,174,239	514,239	74,565	751,520	946,276	332,708	1,295,575	19
—	2,760	—	24,178	31,629	—	14,880	20,435	20
—	655	—	5,810	7,405	—	797	1,587	21
1,554,886	8,304,215	8,610,167	1,200,441	10,320,878	7,381,140	3,611,370	11,581,829	22
1,050,031	14,395,031	7,940,979	304,878	8,563,553	9,481,888	5,167	12,580,979	23
1,153,933	20,206,972	10,561,195	472,033	11,469,050	7,582,764	3,018	9,821,087	24
101,485	105,959	20	12,282	14,376	200	4,390	11,634	25
347,069	367,955	120	53,704	64,800	1,218	14,257	32,302	26
188,794	188,794	19,976	247,884	271,838	83,822	138,922	403,300	27
249,337	249,337	22,024	315,815	342,549	69,758	137,360	362,033	28
24,170	37,101	2	8,616	17,560	2,280	17,247	25,278	29
62,049	68,176	10	16,692	34,615	2,105	20,240	30,074	30
3,751,111	10,768,872	7,096,419	4,765,202	14,321,048	20,735,804	3,217,419	36,195,127	31
3,059,427	9,349,455	6,623,635	4,694,519	14,152,033	10,738,497	1,446,014	18,717,105	32
22,377	59,389	613	2,402	56,263	—	20,885	84,258	33
76,494	222,707	2,415	9,395	241,092	—	69,941	265,281	34
135,051	228,546	31,775	47,696	113,262	15,976	154,290	177,715	35
540,481	920,440	181,786	263,812	606,342	68,448	473,921	569,653	36
4,237,542	5,954,284	166,600	278,200	2,357,384	—	885	172,825	37
496,416	668,077	11,895	22,523	223,732	—	66	6,761	38
1,018,327	2,113,302	1,108,789	717,086	3,201,430	1,110,899	105,631	3,180,502	39
1,560,499	3,475,834	2,331,294	1,344,976	6,231,170	1,096,888	97,597	3,526,639	40
6,661,588	77,978,037	29,294,612	42,324,894	129,215,157	92,498,351	16,592,797	136,489,238	41
14,000,932	185,044,806	73,489,796	91,442,298	310,952,138	119,976,127	23,335,277	179,990,730	42
21,546,637	220,573,759	93,224,170	98,635,857	344,317,521	139,635,805	25,597,691	210,321,665	43
1,229,398	1,314,911	4,670	719,948	819,781	4,791	854,829	954,616	44
2,779,255	2,983,843	6,170	1,236,851	1,481,097	3,957	939,910	1,103,899	45
249	54,941	242	840	24,588	395	—	19,348	46
1,617	454,528	2,000	7,722	187,003	2,244	—	94,178	47
—	613,540	39,747	—	629,620	—	30,549	124,583	48
—	1,320,773	39,747	—	1,350,201	—	63,625	257,510	49
5,517	805,203	357,241	3,544	397,266	571,347	12,710	651,135	50
22,495	4,283,772	2,096,098	19,709	2,343,965	2,214,820	43,994	2,525,407	51
51,660	746,860	1,083,730	60,250	1,360,068	1,064,640	240	1,064,880	52
2,415	44,549	68,328	1,219	84,298	22,572	34	22,606	53



**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>I. Vegetable Products—con.</b>					
Flour and milled products—concluded.					
1	Rye flour..... brl.	236	1,667	1,907	11,064
	\$	2,393	22,830	25,283	107,565
2	Screenings..... cwt.	—	—	—	—
	\$	—	—	—	—
3	Wheat flour..... brl.	5,254,254	8,800	9,205,439	5,824,811
	\$	56,365,188	99,794	99,931,659	61,494,045
4	All other meal..... brl.	—	701	2,061	1,835
	\$	—	1,086	24,969	15,470
<b>Total flour and milled products..... \$</b>		<b>58,786,559</b>	<b>1,830,482</b>	<b>107,445,723</b>	<b>65,749,981</b>
Bakery Products and prepared food—					
5	Biscuits and bread..... cwt.	33,729	2,074	78,049	743
	\$	440,388	23,999	1,319,925	13,545
6	Cereal foods, prepared, all kinds... \$	3,678,132	211,589	4,247,249	1,048,826
7	Macaroni, spaghetti and vermicelli..... lb.	—	—	—	3,587,770
	\$	—	—	—	363,284
8	Cornstarch..... lb.	—	—	—	91,690
	\$	—	—	—	6,724
9	Potato starch..... lb.	—	—	—	88,000
	\$	—	—	—	6,945
<b>Total grains, flours and kindred products. \$</b>		<b>160,848,294</b>	<b>9,576,036</b>	<b>233,736,332</b>	<b>212,603,985</b>
Oils, vegetable, and by-products—					
10	Oil cake..... cwt.	8,028	12,357	43,046	291,219
	\$	22,764	31,740	119,275	946,083
11	Oils, vegetable, n.o.p..... gal.	6,596	602,429	743,574	11,981
	\$	7,696	617,533	857,334	32,587
<b>Total oils, vegetable, and by-products \$</b>		<b>30,460</b>	<b>649,273</b>	<b>976,609</b>	<b>978,670</b>
Rubber and its products—					
Raw and partly manufactured—					
12	Waste..... cwt.	—	14,365	14,365	1,278
	\$	—	129,925	129,925	8,662
13	Belting..... lb.	—	—	—	2,235
	\$	—	1,667	14,332	1,295
14	Boots and shoes..... \$	205,429	135,990	2,058,715	829,154
15	Clothing, including waterproofed..... \$	1,720	517	13,784	782
16	Hose..... \$	6,550	151,282	195,556	25,137
17	Tires..... \$	154,439	407,162	3,016,974	3,548,149
18	All other mfs. of India rubber, n.o.p.... \$	10,688	83,492	200,304	69,665
<b>Total rubber and its products..... \$</b>		<b>378,826</b>	<b>910,035</b>	<b>5,629,590</b>	<b>4,482,844</b>
Seeds for sowing—					
19	Clover..... bush.	64,983	160,677	226,344	27,154
	\$	966,660	2,380,931	3,361,170	694,760
20	Flax..... bush.	—	—	—	34,052
	\$	—	—	—	316,134
21	Grass..... bush.	1,292	45,919	47,444	422
	\$	7,148	89,594	98,356	2,513
22	All other seeds, n.o.p..... \$	303	43,498	56,707	2,891
<b>Total seeds for sowing..... \$</b>		<b>974,111</b>	<b>2,514,023</b>	<b>3,516,233</b>	<b>1,016,298</b>
Sugar, molasses, syrups and confectionery—					
23	Confectionery..... \$	922,743	246,739	1,962,744	5,002,031
24	Maple sugar..... lb.	169,270	4,412,178	4,703,366	33,379
	\$	48,569	977,443	1,062,895	7,565
25	Maple syrup..... gal.	3,785	2,182	6,950	1,664
	\$	6,072	4,411	12,202	2,941
26	Molasses..... gal.	—	—	—	34,532
	\$	—	—	—	16,540
27	Sugar house syrup..... gal.	—	—	—	399,644
	\$	—	—	—	172,097

11.—Exports of Canada to United States, United Kingdom and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
9,590	35,786	—	450	10,833	357	—	1,502	1
74,099	297,768	—	5,179	104,613	2,091	—	9,955	2
1,271,695	1,271,695	7,763	1,122,483	1,152,385	—	385,714	385,714	3
1,126,799	1,126,799	10,847	651,370	702,144	—	53,661	53,661	4
29,762	8,863,068	2,746,780	1,187,750	6,017,032	4,737,020	570,667	7,414,282	5
337,514	94,262,928	28,896,091	12,023,090	66,520,490	33,943,408	3,824,832	53,478,150	6
257	2,156	—	345	855	4,889	244	6,305	7
2,520	18,387	—	3,439	6,805	22,320	2,092	31,740	8
4,396,714	104,793,347	31,119,231	13,948,579	72,780,616	36,211,412	4,928,148	57,557,097	9
1,510	14,647	—	3,571	9,038	7	1,582	5,291	10
14,787	203,721	—	29,944	139,532	158	16,596	84,346	11
5,399	1,087,901	803,248	20,248	854,254	773,292	15,997	816,575	12
80,964	4,442,176	2,292,980	268	2,545,359	2,476,796	463	2,695,016	13
6,763	448,981	269,598	48	299,560	218,556	63	240,642	14
11,500	129,792	1,720	6,410	34,009	—	—	13,205	15
878	10,056	220	434	3,137	—	—	1,148	16
169,025	460,025	—	—	570	—	—	30	17
8,433	28,257	—	—	63	—	—	6	18
25,929,810	327,146,022	125,416,517	112,635,110	418,394,683	176,739,223	30,558,495	272,021,479	19
20,725	437,925	89,799	13,850	195,247	59,180	15,640	413,916	20
61,149	1,465,366	296,044	38,453	663,834	143,517	32,189	1,010,152	21
918,673	975,766	32	251,982	275,459	102	375,840	397,923	22
757,999	878,346	125	146,261	197,482	235	73,992	91,192	23
819,148	2,343,712	296,169	184,714	861,316	143,752	106,181	1,101,344	24
64,423	65,701	—	22,696	22,716	—	17,192	17,192	25
433,477	442,139	—	133,316	133,516	—	62,623	62,623	26
285	29,902	—	10,303	99,359	—	615	106,746	27
269	24,455	—	7,755	83,869	—	455	56,197	28
3,203	1,750,967	457,561	2,684	1,524,969	212,491	8,217	709,299	29
6,055	56,640	411	276	36,534	1,172	5,776	19,253	30
102,230	169,822	8,192	142,328	225,435	1,648	122,255	143,589	31
253,249	7,895,172	3,641,720	179,133	8,253,986	1,098,428	72,750	2,811,652	32
62,638	230,768	100,399	199,748	581,219	14,332	158,937	259,196	33
861,121	10,069,963	4,208,283	665,240	10,839,528	1,328,171	431,013	4,061,809	34
157,868	186,328	43,426	123,524	179,255	22,625	229,110	260,661	35
3,583,510	4,314,341	723,093	1,098,783	2,005,480	191,452	1,546,933	1,816,504	36
79	35,009	51,304	9,224	60,528	14,132	1,266	15,418	37
926	327,139	357,974	16,518	374,492	39,239	4,191	43,476	38
57,196	58,535	1,388	81,130	93,690	1,200	83,479	86,339	39
146,424	152,408	6,848	167,445	202,554	5,796	316,420	326,369	40
46,827	52,967	432	23,142	28,562	17,898	20,950	43,337	41
3,777,687	4,846,855	1,088,347	1,305,888	2,611,068	253,885	1,888,494	2,229,686	42
132,728	5,988,824	419,623	57,524	1,190,718	45,736	29,124	440,174	43
3,971,435	4,005,124	18,924	7,979,970	7,999,233	28,511	2,052,774	2,092,715	44
1,114,304	1,121,959	5,499	1,956,637	1,962,258	4,409	158,799	164,389	45
6,790	9,270	1,785	9,373	11,254	768	2,739	3,659	46
15,702	20,669	5,295	26,162	31,767	2,054	6,794	9,152	47
1,753,225	1,787,757	205	883,685	887,667	3,381	1,277,646	1,290,425	48
163,004	179,544	955	95,879	102,398	470	60,104	66,007	49
50,044	449,734	—	—	—	—	—	—	50
22,770	194,891	—	—	—	—	—	—	51

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>I. Vegetable Products—concluded.</b>					
Sugar, molasses, etc.—concluded.					
1	Sugar, all kinds, n.o.p..... lb.	52,980	216	2,052,935	129,704,089
	\$	4,823	19	169,708	11,824,363
2	Syrups, n.o.p..... \$	—	—	—	599,807
	<b>Total sugar, molasses, syrup, and confectionery..... \$</b>	<b>982,207</b>	<b>1,228,612</b>	<b>3,207,549</b>	<b>17,625,344</b>
Tea and coffee—					
3	Coffee and imitations of..... lb.	1,830	665	36,219	30
	\$	952	226	10,488	15
Tobacco—					
4	Tobacco, manufactured..... lb.	62,828	27,611	90,453	181,176
	\$	35,911	9,496	45,414	94,430
5	Cigars..... lb.	—	—	—	2,209
	\$	2,596	—	65,359	7,361
6	Cigarettes..... lb.	—	—	—	2,310,005
	\$	2,562,729	823	4,549,798	2,586,913
7	Stems and cuttings..... cwt.	94	8,656	8,750	8,093
	\$	2,200	30,649	32,849	2,947
8	All other tobacco..... lb.	641,275	5,907	771,741	235,465
	\$	560,485	6,218	701,115	198,596
	<b>Total tobacco..... \$</b>	<b>3,163,921</b>	<b>47,186</b>	<b>5,394,535</b>	<b>2,890,247</b>
Vegetables, fresh—					
9	Beets, sugar..... ton	—	2,898	2,898	—
	\$	—	29,873	29,873	—
10	Potatoes..... bush.	—	1,813,496	2,822,550	—
	\$	—	1,643,855	2,832,350	—
11	Turnips..... bush.	—	2,223,426	2,235,218	—
	\$	—	628,889	633,028	—
12	All other vegetables, fresh..... \$	—	—	—	—
Vegetables, prepared—					
13	Canned vegetables..... lb.	—	—	—	16,902,987
	\$	1,917,597	2,811,076	9,154,622	1,360,419
14	Dried vegetables..... lb.	—	—	—	36
	\$	—	—	—	8
15	Other vegetables..... \$	3,323	159,425	191,549	—
	<b>Total vegetables..... \$</b>	<b>1,920,920</b>	<b>5,273,118</b>	<b>12,841,422</b>	<b>1,360,427</b>
Other vegetable products—					
16	Alcohol, wood..... gal.	316,894	920	327,313	167,380
	\$	584,646	2,116	606,550	298,796
17	Flax, seed, n.o.p..... bush.	106,117	1,723,161	1,890,978	72,785
	\$	1,431,860	6,323,484	7,759,852	354,543
18	Fodders, other, n.o.p..... \$	—	—	—	—
19	Groceries, all kinds, n.o.p..... \$	1,317	65,558	174,077	1,312
20	Gum, chicla..... lb.	—	759,817	759,817	—
	\$	—	699,333	699,333	—
21	Hay..... ton	6,533	471,432	492,208	4,878
	\$	103,947	7,260,936	7,666,491	95,786
22	Hops..... lb.	—	11,960	14,580	—
	\$	—	1,260	1,715	—
23	Nuts..... lb.	3,200	23,509	65,930	—
	\$	808	7,109	18,791	—
24	Plants, shrubs and trees..... \$	—	19,648	23,510	213
	Roots, herbs, bark, flowers, etc., for medicinal use, n.o.p..... \$	—	—	—	10,871
25	Sea grasses and plants..... \$	—	—	—	—
26	Senega root..... lb.	27,212	289,363	340,148	17,789
	\$	25,175	236,764	281,875	24,815
27	Straw..... ton	1	12,172	12,247	6
	\$	9	76,238	77,155	66
28	Vinegar..... gal.	—	—	—	5,352
	\$	—	—	—	5,901
29	Other agricultural products..... \$	50,545	115,518	177,192	7,534
	<b>Total vegetable products (except chemicals, fibres and wood)..... \$</b>	<b>173,312,085</b>	<b>35,975,346</b>	<b>288,893,218</b>	<b>249,708,190</b>

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
4,772,912	245,321,907	1,124,142	56,889,790	65,706,539	113,178,263	373,775	140,883,112	1
504,523	22,479,409	247,161	9,999,566	11,837,930	9,050,710	34,963	10,922,436	2
3,564	710,209	5,481	—	11,454	19,257	—	19,299	
<b>1,956,595</b>	<b>30,695,005</b>	<b>684,014</b>	<b>12,135,768</b>	<b>15,136,525</b>	<b>9,122,636</b>	<b>289,784</b>	<b>11,621,457</b>	
68,189	85,907	—	4,118	13,473	—	1,135	10,884	3
11,273	17,535	—	1,539	5,351	—	374	3,546	
23,695	223,595	160,112	26,831	200,153	340,487	12,847	471,991	4
21,080	130,264	90,389	34,097	130,457	135,784	5,216	175,826	5
15	7,394	995	1	5,745	277	7	539	6
50	14,679	2,820	8	13,288	1,350	24	2,399	7
735	3,076,949	29,536	176	69,861	—	69	24,205	8
1,002	3,324,055	20,134	382	41,983	—	262	24,743	9
4,768	12,861	70	5,559	5,653	88	4,985	7,410	10
4,406	7,353	2,638	3,640	7,400	1,325	4,526	37,975	11
2,357	247,871	3,464	5,597	13,514	147	6,733	13,158	12
3,970	211,830	3,173	9,485	17,716	176	11,279	18,686	13
<b>30,508</b>	<b>3,688,181</b>	<b>119,154</b>	<b>47,612</b>	<b>210,844</b>	<b>138,635</b>	<b>21,307</b>	<b>259,629</b>	
7,723	7,723	—	11,502	11,502	—	10,481	10,481	14
70,235	70,235	—	103,175	103,175	—	63,151	63,151	15
5,480,754	6,327,343	—	4,204,684	5,036,769	—	1,822,004	3,755,529	16
6,819,405	8,039,107	—	8,328,862	9,657,612	—	1,204,620	2,936,676	17
2,097,284	2,128,882	—	1,756,538	1,786,755	—	1,648,803	1,664,223	18
939,630	957,042	—	444,830	460,506	—	456,044	461,633	19
140,583	187,871	363	105,284	152,123	383	212,472	242,454	20
595,795	19,107,690	2,928,361	840,390	4,779,126	2,819,062	1,539,644	4,745,397	21
41,274	1,527,202	274,040	39,312	408,203	232,192	58,379	321,635	22
2,809,332	3,473,729	—	209,541	219,005	1,500	21,960	25,595	23
679,872	875,026	—	56,964	59,747	396	4,590	5,419	24
—	—	—	—	—	—	—	—	25
<b>8,690,999</b>	<b>11,656,483</b>	<b>274,403</b>	<b>9,078,427</b>	<b>10,841,366</b>	<b>232,971</b>	<b>1,999,256</b>	<b>4,036,968</b>	
—	168,849	113,205	198,022	411,296	95,717	10	213,653	26
—	302,636	173,868	541,229	784,228	105,544	16	210,734	27
1,020,192	1,092,977	—	1,343,591	1,343,591	—	3,615,835	3,615,835	28
4,713,993	5,068,536	—	3,473,610	3,473,610	—	6,564,372	6,564,372	29
1,111,926	1,144,414	1,158	842,035	932,406	54,454	357,313	424,530	30
7,124	80,655	1,894	2,558	113,020	48	2,688	125,838	31
593,423	593,423	—	131,152	131,152	—	11,122	11,122	32
734,414	734,414	—	197,416	197,416	—	3,396	3,396	33
201,586	218,561	374	162,763	179,398	4,076	19,435	31,287	34
3,675,105	4,087,670	9,629	3,712,979	4,210,594	96,911	347,104	650,379	35
—	6,698	19,265	26,976	75,308	769,283	—	780,515	36
—	1,171	18,492	20,226	55,433	377,123	—	379,668	37
122,012	123,993	17,880	15,538	35,272	22,840	27,458	50,955	38
16,534	16,968	4,330	4,298	9,123	5,717	7,013	12,860	39
93,726	98,320	412	88,971	97,074	497	83,666	87,025	40
116,121	128,369	1,892	67,532	71,532	1,833	39,249	44,156	41
47,134	57,039	—	39,724	47,632	—	21,831	33,389	42
388,616	415,223	26,687	236,834	268,363	10,564	156,683	181,894	43
558,926	594,088	26,178	252,863	283,830	7,469	108,097	124,748	44
5,350	5,539	—	6,909	7,042	140	2,424	2,826	45
41,708	44,842	—	69,979	72,181	2,285	21,256	27,674	46
17,301	33,485	—	64,761	72,882	—	64,322	66,957	47
9,869	20,376	—	21,721	25,220	—	20,406	21,848	48
270,034	292,028	11,367	54,222	69,617	111,394	112,068	305,890	49
<b>55,735,692</b>	<b>416,122,771</b>	<b>141,343,424</b>	<b>147,081,112</b>	<b>482,924,672</b>	<b>196,322,593</b>	<b>47,587,231</b>	<b>317,814,106</b>	



**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>II. Animals and their products (except chemicals and fibres).</b>					
Animals, living, for improvement of stock—					
1	Cattle..... No.	-	-	-	-
	\$	-	-	-	-
2	Poultry..... No.	-	-	-	53
	\$	-	-	-	59
3	Sheep..... No.	-	-	-	-
	\$	-	-	-	-
4	Swine..... No.	-	-	-	-
	\$	-	-	-	-
Other animals, living—					
5	Cattle, one year old or less, n.o.p..... No.	-	39,838	39,917	-
	\$	-	722,421	723,463	-
6	Cattle, over one year old, n.o.p..... No.	-	268,724	271,579	479
	\$	-	29,135,247	29,346,027	70,200
7	Horses..... No.	7,278	2,360	10,457	173
	\$	1,709,150	430,161	2,302,220	36,045
8	Poultry, n.o.p..... No.	-	-	-	-
	\$	125	382,013	383,526	-
9	Sheep, n.o.p..... No.	-	119,037	120,131	-
	\$	-	1,595,444	1,609,862	-
10	Swine, n.o.p..... No.	-	31,450	32,053	-
	\$	-	753,749	760,040	-
11	All other animals, living, n.o.p..... \$	6,250	116,619	153,131	325
<b>Total, animals, living..... \$</b>		<b>1,715,525</b>	<b>33,135,654</b>	<b>35,278,269</b>	<b>107,160</b>
12	Bones, horns, hoofs and their products..... \$	-	239,991	245,550	-
Fishery products, n.o.p.—					
13	Codfish, haddock, ling, and pollock, fresh. cwt.	7,703	87,858	95,599	2,682
	\$	51,920	508,739	561,022	26,470
14	Codfish, dry salted..... cwt.	11,097	294,972	665,055	1,509
	\$	93,231	3,276,965	8,535,071	19,273
15	Codfish, wet salted and pickled..... cwt.	-	297,477	297,616	-
	\$	-	2,117,688	2,118,668	-
16	Codfish, smoked..... cwt.	3,254	10,841	14,938	1,765
	\$	35,361	142,086	182,773	16,241
17	Codfish, boneless, canned, etc..... cwt.	-	-	-	2,019
	\$	-	-	-	33,182
<b>Total codfish..... \$</b>		<b>180,512</b>	<b>6,045,478</b>	<b>11,397,534</b>	<b>95,166</b>
18	Halibut, fresh..... cwt.	18,914	26,194	45,118	-
	\$	238,855	390,130	695,195	-
19	Herring, fresh or frozen..... cwt.	2,104	337,095	339,199	-
	\$	13,672	1,353,035	1,366,707	-
20	Herring, pickled..... cwt.	86	172,059	245,744	391
	\$	430	953,956	1,348,359	1,563
21	Herring, canned..... cwt.	76	3,869	52,451	1
	\$	1,161	53,784	694,667	7
22	Herring, smoked..... cwt.	2,356	41,604	49,825	1
	\$	18,627	311,997	389,372	20
23	Herring, sea, dry salted..... cwt.	-	-	-	-
	\$	-	-	-	-
<b>Total herring..... \$</b>		<b>33,890</b>	<b>2,672,772</b>	<b>3,799,105</b>	<b>1,590</b>
24	Lobsters, fresh..... cwt.	-	42,487	42,499	-
	\$	-	788,774	789,038	-
25	Lobster, canned..... cwt.	17,981	21,079	48,902	26,887
	\$	872,867	878,370	2,230,064	1,988,364
<b>Total lobsters..... \$</b>		<b>872,867</b>	<b>1,667,144</b>	<b>3,019,102</b>	<b>1,988,364</b>
26	Mackerel, fresh..... cwt.	322	55,131	55,455	-
	\$	3,544	562,741	566,321	-
27	Mackerel, pickled..... cwt.	-	63,087	66,905	-
	\$	-	802,947	849,823	-
<b>Total mackerel..... \$</b>		<b>3,544</b>	<b>1,365,688</b>	<b>1,416,144</b>	<b>-</b>

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
2,372	2,827	—	1,270	1,342	—	664	667	1
1,025,624	1,078,874	—	616,337	635,662	—	267,980	272,085	2
8,907	8,986	28	12,013	12,332	79	8,254	8,444	3
52,155	53,245	450	63,091	64,897	895	56,687	58,033	4
2,155	2,159	—	1,027	1,085	—	1,011	1,023	5
109,403	109,463	—	64,055	66,025	—	34,217	34,417	6
140	144	—	62	69	—	66	75	7
9,841	9,941	—	6,778	7,323	—	3,910	4,251	8
84,260	84,397	—	72,731	72,822	—	51,257	51,334	9
1,769,518	1,771,072	—	1,473,222	1,474,521	—	413,188	413,855	10
415,956	431,128	131	221,278	223,688	35,41	121,970	121,18	11
41,226,415	43,214,655	19,350	19,759,322	19,989,370	4,139,391	3,299,633	7,852,111	12
2,725	3,889	50	2,925	3,626	—	2,129	2,251	13
493,638	708,137	11,100	651,129	780,977	—	517,518	535,428	14
603,384	604,117	—	706,806	707,303	—	839,753	840,450	15
612,458	613,391	—	780,510	781,280	—	797,481	798,401	16
178,524	180,550	—	183,634	185,382	1,178	97,119	100,350	17
1,979,361	1,999,499	—	1,700,992	1,717,734	13,230	535,612	562,452	18
4,294	4,949	—	329	1,179	—	2,448	3,105	19
162,298	170,298	—	5,333	14,202	—	60,059	67,548	20
276,881	297,553	4,050	326,457	351,672	315	484,286	486,906	21
17,717,323	50,026,178	34,970	25,447,233	25,883,663	4,153,831	6,470,571	11,085,487	22
341,342	351,733	—	319,668	320,505	—	82,582	84,357	23
68,151	71,142	—	46,261	46,270	—	41,302	41,566	24
327,841	357,566	—	203,119	203,245	234	154,001	155,557	25
250,834	752,340	1,678	96,217	553,918	1,110	148,335	780,063	26
2,509,198	9,178,857	15,122	957,074	6,049,377	761	1,002,734	6,113,206	27
243,899	244,730	—	145,931	146,312	4,259	154,900	156,949	28
1,447,499	1,454,650	—	830,508	834,187	—	658,004	669,875	29
11,575	14,296	—	13,960	14,444	—	13,850	14,348	30
112,352	144,187	—	147,526	154,807	124	139,750	146,541	31
21,455	26,360	79	16,345	18,090	1,282	13,889	14,022	32
289,738	367,144	4,054	231,478	262,735	16	160,034	162,028	33
4,686,628	11,502,401	19,176	2,389,705	7,504,351	6,667	2,114,323	7,247,207	34
32,504	32,590	—	55,636	55,695	941	65,165	66,339	35
474,456	476,140	—	912,046	913,085	16,690	835,166	854,992	36
336,076	336,106	—	377,679	377,089	—	213,267	213,312	37
814,391	814,621	—	1,058,039	1,058,124	—	396,607	396,860	38
83,356	192,325	—	40,015	124,873	—	51,775	108,182	39
400,011	827,482	—	177,055	496,232	—	212,152	398,689	40
1,324	35,646	—	1,545	20,588	6	457	11,740	41
13,967	470,968	—	18,710	274,354	79	3,880	93,339	42
62,894	73,747	17	54,963	65,074	—	26,219	47,085	43
426,570	521,038	83	313,364	389,791	—	109,153	201,064	44
40,834	448,251	—	7,812	561,675	—	40	643,574	45
59,100	775,389	—	16,282	991,309	—	453	1,000,427	46
1,714,039	3,409,498	83	1,583,150	3,209,810	79	722,245	2,090,379	47
42,707	42,707	—	52,643	52,643	—	72,926	72,926	48
848,421	848,421	—	1,033,738	1,033,738	—	1,403,257	1,403,257	49
17,716	59,246	23,446	31,462	66,585	33,249	15,691	72,440	50
1,073,454	4,083,678	2,006,994	2,230,393	5,179,566	1,797,467	736,521	3,756,443	51
912,875	4,932,099	2,006,994	3,264,131	6,213,307	1,797,467	2,139,778	5,159,700	52
52,295	52,295	—	48,141	48,141	—	58,195	58,195	53
433,955	433,955	—	573,712	573,712	—	560,074	560,074	54
74,703	91,661	—	28,410	61,298	—	29,651	44,066	55
800,297	948,634	—	293,454	564,228	—	268,061	383,617	56
284,252	1,432,588	—	867,156	1,137,940	—	828,135	943,691	57

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>II.—Animals and their products (except chemicals and fibres)—con.</b>					
Fishery products, n.o.p.—concluded.					
1	Oysters.....	\$ 16	5,003	5,346	79
2	Salmon, fresh and frozen..... cwt.	3,861	71,269	80,338	4,648
	\$	74,717	698,366	794,332	94,438
3	Salmon, smoked..... cwt.	—	147	180	—
	\$	—	2,578	3,360	—
4	Salmon, canned..... cwt.	292,651	19,368	478,137	310,451
	\$	7,115,783	354,331	10,297,803	7,582,373
5	Salmon, dry salted (chum)..... cwt.	—	82,237	82,237	—
	\$	—	298,280	238,280	—
6	Salmon, pickled..... cwt.	—	5,980	10,556	467
	\$	—	99,701	144,194	5,120
7	Salmon or lake trout..... cwt.	—	25,555	25,567	—
	\$	—	263,900	264,035	—
8	Sea fish, other, fresh..... cwt.	391	12,124	12,641	—
	\$	1,833	124,780	127,049	—
9	Sea fish, other, pickled..... cwt.	96	704	804	—
	\$	640	4,834	5,509	—
10	Sea fish, other, preserved..... cwt.	911	9,143	183,512	453
	\$	15,956	66,834	358,509	7,253
11	Smelts..... cwt.	—	55,622	55,624	—
	\$	—	677,825	677,855	—
12	Fish, bait.....	—	50,468	51,242	—
13	Fish, all other, fresh.....	63,526	2,474,722	2,588,286	18,319
14	Tullibee..... cwt.	—	39,582	39,582	—
	\$	—	231,971	231,971	—
	<b>Total fish.....</b>	<b>\$ 8,602,139</b>	<b>17,600,764</b>	<b>36,166,278</b>	<b>9,815,979</b>
15	Other fishery products.....	\$ 18,869	197,839	226,348	20,229
	<b>Total fishery products, n.o.p.....</b>	<b>\$ 8,621,008</b>	<b>17,793,693</b>	<b>36,392,626</b>	<b>9,836,298</b>
Furs, hides, leather and their products—					
16	Furs, dressed.....	\$ 16,125	39,017	85,381	35,532
17	Furs, undressed.....	\$ 3,744,034	9,690,255	13,531,789	3,939,539
18	Furs, manufactured.....	\$ 3,796	14,192	120,451	83,846
	<b>Total furs.....</b>	<b>\$ 3,763,955</b>	<b>9,743,464</b>	<b>13,737,621</b>	<b>4,058,917</b>
19	Hides and skins other than fur.....	\$ —	7,651,052	7,651,071	6,176
Leather, unmanufactured—					
20	Harness, leather..... lb.	—	5,790,674	5,810,897	—
	\$	—	3,993,575	4,009,179	2,046
21	Sole leather..... lb.	1,878,774	2,603,675	4,810,791	3,979,583
	\$	825,518	1,119,566	2,163,808	1,613,398
22	Upper leather..... lb.	316,622	324,970	739,747	—
	\$	1,153,036	872,976	2,220,162	4,529,964
23	Other unmanufactured leather.....	\$ 2,197	307,141	363,769	144,403
Leather, manufactured—					
24	Boots and shoes.....	\$ 495,977	400,641	1,130,334	2,754,076
25	Harness and saddlery.....	\$ 28,855	140,528	175,164	574
26	Other manufactures of leather.....	\$ 23,109	2,341,452	2,375,296	188,691
	<b>Total leather.....</b>	<b>\$ 2,528,692</b>	<b>9,175,879</b>	<b>12,437,712</b>	<b>9,233,152</b>
27	Hair.....	\$ —	259,622	259,622	—
Meats, fresh—					
28	Beef, fresh..... cwt.	916,449	329,356	1,258,027	287,305
	\$	19,991,934	6,026,867	26,223,955	4,873,257
29	Mutton and lamb, fresh..... cwt.	—	—	—	3,208
	\$	—	—	—	51,887
30	Pork, fresh..... cwt.	—	23,048	24,104	—
	\$	—	572,621	592,955	—
31	Poultry and game, dressed or undressed.....	\$ 168,515	62,922	257,749	236,643
Meats cured, canned or otherwise prepared—					
32	Bacon and hams, shoulders and sides..... cwt.	1,210,362	29,380	1,246,887	2,209,456
	\$	39,149,845	862,953	40,242,175	69,293,178

11.—Exports of Canada to United Kingdom, United States and all Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
12,236	12,548	—	5,961	6,369	36	3,796	4,396	1
307,555	312,419	2,004	75,635	87,168	8,875	96,830	106,702	2
1,321,679	1,420,171	60,460	656,380	743,812	244,436	735,064	993,373	3
97	143	40	87	135	—	115	647	4
1,626	2,710	640	1,517	2,344	—	1,951	7,306	5
62,248	615,288	168,567	12,285	308,578	159,004	5,449	436,239	6
681,547	12,067,319	5,584,566	237,018	7,580,977	3,473,776	18,457	6,433,252	7
7,733	27,277	—	226	56,873	—	5,082	84,234	8
26,419	71,051	—	2,295	131,160	—	8,768	221,588	9
8,976	12,457	173	8,979	10,978	5	9,521	14,570	10
170,000	208,293	4,904	183,568	207,367	50	181,278	231,355	11
28,729	28,739	—	29,842	29,842	—	31,141	31,141	12
298,596	298,696	—	363,758	363,758	—	346,569	346,569	13
4,850	4,886	—	12,008	12,008	—	4,156	4,193	14
35,970	35,535	—	31,080	31,080	—	29,575	29,953	15
53	344	50	159	209	18	375	470	16
462	1,789	600	1,332	1,932	90	1,649	2,105	17
819	1,632	—	475	489	2	108	112	18
18,238	33,570	—	9,692	9,904	150	1,856	2,030	19
61,995	61,995	—	59,921	59,921	—	82,655	82,655	20
763,942	763,942	—	774,359	774,359	—	1,064,388	1,064,388	21
23,650	24,592	—	50,874	51,285	—	65,405	65,405	22
3,032,170	3,050,489	—	3,330,229	3,330,229	—	3,148,476	3,148,493	23
49,875	49,875	—	63,293	63,293	—	33,979	33,979	24
312,723	312,723	—	324,858	324,858	—	118,884	118,844	25
17,180,250	40,687,172	7,679,338	15,286,047	33,130,003	5,540,898	12,572,061	29,339,877	26
237,631	289,575	3,085	197,123	200,361	100	34,133	41,070	27
17,417,881	40,976,747	7,682,423	15,483,170	33,339,364	5,540,998	12,606,194	29,380,957	28
33,180	94,688	20,701	39,309	168,215	13,119	13,955	41,013	29
16,540,822	20,628,109	3,509,714	7,932,253	11,731,061	4,253,569	10,460,991	14,795,337	30
20,532	199,174	146,078	35,935	331,168	62,773	51,301	141,849	31
16,493,534	20,921,971	3,676,493	8,907,500	12,239,444	4,329,461	10,526,247	14,978,199	32
19,738,006	19,762,646	17,874	4,708,612	4,732,207	47,686	3,936,788	4,027,427	33
816,957	834,909	3,655	416,559	435,076	25,031	330,513	360,248	34
924,379	5,524,409	237,369	828,859	1,391,510	1,738,903	3,715,634	5,614,385	35
729,103	2,773,642	184,151	429,568	870,183	516,140	1,126,450	1,710,518	36
2,182,668	7,421,047	2,189,945	797,284	3,397,075	1,149,446	1,125,604	2,344,024	37
515,553	712,670	63,178	337,678	436,094	7,530	304,831	350,410	38
350,874	5,679,720	904,078	276,015	1,441,338	82,764	162,859	272,346	39
98,946	109,101	3,564	119,423	144,786	155	31,194	34,359	40
164,623	526,063	23,543	276,196	356,817	5,247	84,010	99,880	41
4,858,724	18,057,152	3,372,114	2,652,723	7,081,369	1,786,313	3,165,461	5,171,785	42
332,112	339,785	195	226,105	226,365	1,453	135,522	136,975	43
344,180	1,038,995	88,838	358,383	519,994	57,973	216,478	283,566	44
5,892,484	18,868,069	1,262,349	5,829,181	8,331,298	682,313	2,550,093	3,324,037	45
46,586	61,401	—	62,421	64,055	7,730	69,988	78,770	46
1,027,172	1,314,573	—	1,695,111	1,626,792	122,177	1,198,783	1,342,146	47
12,844	15,250	2,948	9,338	16,014	759	7,146	10,493	48
268,827	322,384	75,738	316,151	493,220	14,000	175,478	229,442	49
129,648	430,728	12,763	523,128	585,859	127,575	750,490	916,347	50
14,798	2,236,426	974,228	5,997	982,338	986,623	1,404	992,080	51
424,639	70,123,580	31,201,380	203,960	31,492,407	22,873,449	47,991	23,012,480	52



**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>II. Animals and their products—concluded.</b>					
Meats cured, canned or otherwise prepared—con.					
1	Beef, pickled, in barrels..... cwt.	8,440	8,043	20,076	1,077
	\$	155,685	146,445	370,859	23,825
2	Canned meats, n.o.p..... lb.	7,456,825	663,850	14,140,717	2,347,122
	\$	3,087,592	176,256	5,701,510	993,880
3	Extracts of fluid beef..... lb.	—	—	—	180
	\$	—	—	—	190
4	Pork, dry salted..... cwt.	—	—	—	14,746
	\$	—	—	—	453,578
5	Pork, pickled, in barrels..... cwt.	331,056	15,311	349,077	657
	\$	10,660,125	416,415	11,118,069	18,282
6	All other meats, n.o.p..... lb.	3,454,672	4,491,959	8,116,892	8,626,310
	\$	399,775	652,258	1,082,889	1,119,799
	<b>Total meats..... \$</b>	<b>73,613,471</b>	<b>8,916,737</b>	<b>85,590,161</b>	<b>77,064,497</b>
Milk and its products—					
7	Cream..... gal.	—	485,015	485,015	—
	\$	—	620,725	620,725	—
8	Milk, fresh..... gal.	—	827,973	827,973	—
	\$	—	226,777	226,777	—
9	Butter..... lb.	9,915,131	2,918,651	13,659,157	3,932,674
	\$	4,530,177	1,199,226	6,140,864	2,323,479
10	Cheese..... lb.	120,056,420	150,065	152,207,037	89,977,759
	\$	27,525,634	48,265	35,223,983	25,720,370
11	Milk, condensed, canned or preserved.... lb.	30,525,473	17,554,913	50,786,856	30,941,398
	\$	4,530,933	2,058,831	7,035,297	5,031,162
	<b>Total milk and its products.....</b>	<b>36,536,744</b>	<b>4,155,760<sup>1</sup></b>	<b>49,249,582<sup>1</sup></b>	<b>33,075,011</b>
Oils, fats, greases and waxes—					
12	Animal oils, neat's foot, etc..... gal.	10,742	72,764	83,466	38,743
	\$	26,412	121,337	147,749	119,515
13	Cod liver oil..... gal.	—	295,050	297,305	10,306
	\$	—	396,675	399,666	11,457
14	Seal oil..... gal.	8,886	74,637	83,523	21,602
	\$	12,420	109,382	121,802	34,866
15	Whale oil..... gal.	—	43,352	43,352	2,889
	\$	—	66,144	66,144	4,924
16	Other fish oil..... gal.	—	118,277	120,060	730
	\$	—	123,511	124,476	650
Other fats, greases and waxes—					
17	Grease and grease scraps..... cwt.	3,685	34,192	37,883	10,231
	\$	45,977	148,698	194,695	137,289
18	Lard..... cwt.	2,678	21,998	26,407	45,579
	\$	81,168	600,821	727,581	1,522,018
19	Lard compounds and substitutes..... cwt.	—	—	—	—
	\$	—	—	—	—
20	Tallow..... cwt.	1,087	12,531	13,792	13,099
	\$	16,157	154,387	173,491	195,912
21	Wax..... lb.	—	—	—	20,203
	\$	—	—	—	8,984
	<b>Total oils, fats, greases and waxes.. \$</b>	<b>182,134</b>	<b>1,720,955</b>	<b>1,955,604</b>	<b>2,035,615</b>
Other animal products—					
22	Eggs..... doz.	632,921	26,907	733,445	5,679,510
	\$	329,253	13,076	381,558	3,309,364
23	Glue and glue stock..... \$	—	93,147	93,147	1,783
24	Honey..... lb.	340,197	12,038	380,565	3,615
	\$	81,608	2,540	92,187	878
25	Sausage casings..... \$	381,540	362,099	814,017	118,477
26	Tails..... \$	—	14,028	14,028	—
27	Tankage..... cwt.	—	—	—	—
	\$	—	—	—	—
28	Other animal products, n.o.p..... \$	8,268	784,950	798,071	38,756
	<b>Grand total Animals and their products (except chemicals and fibres)..... \$</b>	<b>127,812,198</b>	<b>94,067,557</b>	<b>244,990,826</b>	<b>138,885,994</b>

<sup>1</sup>Includes casein valued at \$1,936 in 1919 and \$1,413 in 1922.

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
2,001	61,483	—	1,994	15,072	37	4	483	1
30,354	769,587	—	29,764	173,291	512	46	5,676	2
112,879	2,812,706	283,732	85,739	437,239	690,004	3,446	708,321	3
27,845	1,102,842	168,101	35,287	220,437	207,583	1,288	213,397	4
15,666	17,078	10,642	6,891	20,987	—	2,273	2,561	5
9,960	12,105	7,732	4,070	13,873	—	3,510	3,606	6
8,859	39,497	1,096	394	9,125	2,087	600	12,345	7
226,757	1,069,882	33,676	6,599	198,502	33,534	5,965	155,587	8
3,188	12,076	44	806	6,118	—	331	6,410	9
69,490	249,304	1,160	15,246	110,750	—	1,908	68,679	10
2,897,004	15,644,056	3,107,218	2,568,483	11,060,647	3,136,585	1,180,551	5,836,188	11
371,889	1,898,180	399,165	439,605	1,255,091	304,239	163,930	555,150	
8,479,065	96,161,234	33,162,064	8,998,102	44,501,520	24,345,322	4,899,482	29,826,547	
795,780	795,780	—	1,279,195	1,279,195	—	1,671,678	1,671,678	7
1,122,424	1,122,424	—	1,987,461	1,987,461	—	2,479,080	2,479,080	8
1,985,113	1,985,113	—	1,508,618	1,508,618	—	1,391,299	1,391,299	9
576,666	576,666	—	412,916	412,916	—	311,922	311,922	10
10,693,311	17,612,605	2,098,716	5,993,786	9,739,414	3,713,709	3,032,939	8,430,591	11
5,712,727	9,844,359	1,016,935	3,156,951	5,128,831	1,444,657	1,080,357	3,224,390	
6,031,404	126,395,777	122,652,290	641,950	133,620,340	125,942,940	2,969,759	133,849,760	
1,575,264	36,336,863	34,024,595	184,883	37,146,722	24,007,726	464,189	25,440,322	
15,466,673	54,247,498	21,904,938	14,919,288	49,147,451	16,180,302	4,894,690	34,042,679	
2,214,166	8,517,771	3,644,723	2,352,319	8,187,937	2,276,575	814,888	5,085,110	
11,201,247	56,398,083	38,886,253	8,094,530	52,863,867	27,728,958	5,141,849	36,542,237	
31,596	94,376	13,262	50	16,440	8,112	6,255	136,132	12
79,577	242,893	39,667	1,071	45,947	14,987	2,992	146,355	13
365,982	379,972	—	90,231	98,303	211	199,213	203,823	14
366,397	384,097	—	82,073	87,427	105	77,950	79,942	15
14,068	35,670	—	2,298	2,298	—	8,609	18,393	16
14,621	49,487	—	2,349	2,349	—	4,808	12,116	17
509,783	557,299	—	78,542	78,542	—	65,357	27,108	18
638,007	682,365	—	95,454	95,454	—	27,108	101,825	19
155,623	157,153	—	96,462	96,462	—	101,235	21,771	20
123,337	124,482	—	65,789	65,789	—	21,372	40,760	21
65,431	80,436	113	21,170	21,672	1,246	38,349	169,126	22
506,143	732,187	2,149	104,579	108,917	7,830	152,954	47,959	23
11,379	76,218	12,612	1	30,961	32,530	19	686,394	24
321,248	2,428,138	202,990	15	617,334	471,266	241	11,850	25
1,330	1,584	86	22	2,334	—	—	156,373	26
21,023	28,503	2,424	511	57,095	44	15,653	82,806	27
43,039	64,831	—	18,512	18,964	351	77,525	45,643	28
653,085	999,585	—	165,396	172,146	10,288	34,320	10,276	
117,412	155,601	24,356	76,471	102,173	2,160	7,766		
57,954	73,904	6,594	37,270	44,267				
2,781,392	5,745,641	253,824	554,507	1,299,725	496,699	372,716	1,392,267	
131,999	6,000,528	6,266,169	191,258	6,579,853	3,917,870	311,271	4,399,534	22
70,514	3,496,827	4,229,608	118,513	4,425,856	1,839,880	126,851	2,039,352	23
122,529	124,915	2,770	141,728	145,599	1,086	123,536	125,100	24
26,236	33,142	60	36,164	36,929	1,245	70,590	74,107	25
6,000	7,632	20	8,906	9,195	162	12,268	12,840	26
298,389	564,222	138,682	296,069	579,674	93,755	305,595	536,803	27
30,902	30,902	—	18,329	18,329	—	9,413	9,413	28
357,438	357,438	—	232,641	232,681	—	266,877	270,377	
890,811	890,811	—	554,506	554,706	—	308,060	314,396	
115,846	161,385	33,311	120,755	159,549	3,359	128,220	134,578	
30,997,017	314,017,944	91,291,301	75,751,046	188,359,957	70,368,963	48,391,355	135,798,720	

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
III. Fibres, Textiles and Textile Products.					
Cotton and its products—					
1	Cotton waste..... cwt.	—	3,698	4,726	5,230
	\$	—	51,412	69,212	109,245
2	Cotton clothing..... \$	—	—	—	666,654
3	Cotton fabrics and cotton duck..... yds.	221	9,383,084	10,312,627	469,698
	\$	65	2,310,722	2,859,241	409,242
4	Manufactures of cotton, n.o.p..... \$	22,838	269,986	563,752	59,193
	<b>Total cotton and its products..... \$</b>	<b>22,903</b>	<b>2,632,126</b>	<b>3,492,205</b>	<b>1,244,334</b>
Flax, hemp, jute and their products—					
5	Flax fibre and flax tow..... \$	—	827,327	827,327	345,465
6	Other articles..... \$	—	1,016	1,016	393
	<b>Total flax, hemp, etc..... \$</b>	<b>—</b>	<b>828,343</b>	<b>828,343</b>	<b>345,858</b>
7	Silk and its products..... \$	2,071	9,049	36,270	49,128
Wool and its products—					
8	Wool..... lb.	277,100	4,575,364	4,881,839	195,081
	\$	199,750	3,079,896	3,302,846	149,237
9	Clothing, wool, knitted..... \$	—	—	—	129,343
10	Clothing, wool, n.o.p..... \$	—	—	—	299,247
11	Woolens, n.o.p..... \$	510,785	2,807,009	3,518,850	426,626
	<b>Total wool and its products..... \$</b>	<b>710,535</b>	<b>5,886,905</b>	<b>6,821,696</b>	<b>1,004,453</b>
Vegetable fibres and their products—					
12	Binder twine..... cwt.	3,360	82,997	113,105	8,005
	\$	65,320	1,928,533	2,574,734	128,013
Mixed textile products—					
13	Rags..... \$	—	—	—	684,657
14	Cordage, ropes and twine..... \$	38,374	247,683	457,959	48,254
15	Felt, manufactures of..... \$	—	7,024	30,559	2,191
16	Oilcloths, all kinds..... sq.yd.	—	—	116,007	113,890
	\$	—	—	42,610	29,047
17	Sails, awnings, tents and tarpaulins..... \$	—	216,749	275,060	1,515
Wearing apparel, n.o.p.—					
18	Braces or suspenders..... \$	—	—	—	147,772
19	Corsets and parts of..... \$	—	—	—	85,246
20	Gloves and mitts..... \$	—	—	—	20,252
21	Hats and caps..... \$	5,306	3,504	44,710	10,455
22	Clothing and wearing apparel, n.o.p..... \$	615,958	10,432,554	13,426,235	2,544
23	Other articles..... \$	—	—	—	47,638
	<b>Total fibres, textiles and textile products..... \$</b>	<b>1,460,667</b>	<b>22,192,464</b>	<b>28,030,381</b>	<b>3,851,357</b>
IV. Wood, wood products, and paper.					
24	Books and printed matter..... \$	56,307	269,569	408,507	122,555
Paper—					
25	Bags, boxes and cartons..... \$	—	—	—	5,083
26	Bond and writing paper..... cwt.	—	—	—	899
	\$	—	—	—	8,319
27	Book paper..... cwt.	—	—	—	3,911
	\$	—	—	—	29,697
28	Hangings or wall paper..... roll	—	134,084	3,859,108	631,431
	\$	—	12,245	360,567	70,059
29	Printing paper..... cwt.	9,310	11,880,069	13,248,542	467,372
	\$	38,484	36,031,358	40,718,021	1,700,965
30	Paper board..... \$	873,331	1,887,389	3,037,279	1,661,218
31	Roofing paper, all kinds..... \$	95,717	127,313	310,778	51,453
32	Wrapping paper..... cwt.	5,059	76,219	325,792	154,063
	\$	30,649	454,377	2,452,296	1,200,525
33	Other paper and mfs. of..... \$	2,676	108,583	983,968	86,258
	<b>Total paper..... \$</b>	<b>1,040,857</b>	<b>38,621,265</b>	<b>47,862,909</b>	<b>4,813,577</b>

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by class of home produce in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
3,695	9,858	—	887	1,014	—	1,065	1,195	1
63,919	188,679	—	17,302	18,890	—	8,884	10,250	2
7,806	2,885,887	343,799	29,697	1,728,166	99,498	1,486	217,902	3
718,746	9,949,981	209,276	20,029	1,734,616	46,870	77,341	583,976	2
141,927	2,683,273	274,093	22,210	783,072	24,735	126,600	289,245	3
170,439	390,838	71,626	112,606	313,289	30,739	230,032	382,872	4
<b>384,091</b>	<b>6,148,697</b>	<b>689,518</b>	<b>181,815</b>	<b>2,843,417</b>	<b>154,972</b>	<b>367,002</b>	<b>900,269</b>	
982,422	1,439,898	580,863	404,059	1,298,329	100,643	62,702	167,865	5
83,186	117,025	6,841	25,045	57,692	4,503	7,372	14,174	6
<b>1,065,608</b>	<b>1,556,923</b>	<b>587,704</b>	<b>429,104</b>	<b>1,356,021</b>	<b>105,146</b>	<b>70,074</b>	<b>182,039</b>	
41,245	176,461	158,710	23,543	343,077	128,707	13,308	209,715	7
8,859,682	9,084,727	130,619	7,128,065	7,288,373	16,033	1,011,270	1,034,433	8
5,293,522	5,472,236	54,856	2,094,691	2,168,256	2,396	235,563	242,045	9
561,537	1,932,954	82,819	119,273	564,425	23,576	43,886	186,515	10
110,948	4,073,333	86,746	154,830	1,212,246	4,474	98,774	139,994	11
272,879	5,481,202	59,198	389,258	3,905,576	12,801	525,469	601,107	11
<b>6,238,886</b>	<b>16,959,725</b>	<b>283,619</b>	<b>2,758,052</b>	<b>7,850,503</b>	<b>42,567</b>	<b>903,692</b>	<b>1,169,661</b>	
142,690	280,915	17,831	165,184	186,124	14,767	6,811	33,693	12
3,037,525	5,530,908	227,939	2,924,198	3,192,174	194,178	107,021	431,128	13
934,213	1,633,179	276,406	669,856	951,135	85,957	487,364	608,119	14
35,772	179,534	9,858	26,022	185,924	11,135	13,420	79,164	15
33,308	52,947	8,142	19,743	101,401	6,830	8,333	87,726	16
318	299,200	—	59	83,942	—	440	58,203	17
180	112,140	—	28	47,166	—	335	24,934	18
1,825	9,216	1,380	5,169	11,711	—	1,470	3,271	19
25	230,285	199,308	91	287,071	32,223	1,690	47,266	20
202	430,830	182,051	22,991	1,250,567	233,598	159	709,722	21
622,043	658,450	2,014	513	26,833	252	93	29,712	22
2,251	64,831	2,353	7,774	130,438	6,988	1,759	22,234	23
3,102	36,732	1,445	550	27,144	—	2,653	5,854	24
72,180	247,456	12,755	53,430	179,299	18,099	18,261	75,173	25
<b>12,472,456</b>	<b>34,028,314</b>	<b>2,643,202</b>	<b>7,122,882</b>	<b>18,783,884</b>	<b>1,020,612</b>	<b>1,996,634</b>	<b>4,585,987</b>	
353,344	603,318	187,603	557,317	941,209	93,672	351,069	622,501	26
3,532	69,407	4,288	7,646	123,952	7,042	12,316	71,487	27
145	27,157	5,913	10	60,558	—	307	6,497	28
1,545	315,481	72,261	134	989,068	—	3,286	84,125	29
—	47,573	6,860	1,438	65,194	280	42	17,362	30
—	436,530	81,011	11,514	779,763	4,681	689	201,764	31
25,011	3,159,118	509,160	70,861	5,108,287	314,106	49,601	2,359,284	32
2,898	324,149	134,323	17,078	831,772	68,055	10,664	445,536	33
12,553,349	14,272,513	88,849	13,376,836	15,112,586	54,028	14,106,128	15,138,327	34
46,809,178	53,203,792	444,130	68,792,519	78,922,137	222,355	59,891,120	64,635,627	35
2,559,291	4,568,066	2,065,845	2,423,495	5,267,842	694,642	1,217,403	2,306,525	36
230,313	592,875	12,860	106,740	354,690	29,759	65,709	168,155	37
44,897	362,682	90,365	18,929	340,946	46,572	2,017	162,625	38
354,306	2,917,197	966,616	165,291	3,672,780	388,504	16,540	1,264,654	39
406,273	826,122	64,094	645,712	1,161,303	9,888	263,067	355,545	40
<b>50,367,339</b>	<b>63,253,419</b>	<b>3,845,428</b>	<b>72,170,129</b>	<b>92,103,307</b>	<b>1,424,926</b>	<b>61,480,794</b>	<b>69,533,418</b>	



# 11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

		1919.			
No.	Principal articles by classes.	United Kingdom.	United States.	All Countries.	United Kingdom.
<b>IV. Wood, wood products and paper—concluded.</b>					
	Logs and round timber—				
1	Fence posts..... \$	—	—	—	—
2	Logs, cedar..... M ft.	—	—	—	—
3	Logs, hardwood..... \$	62,699	101,017	105,217	—
4	Logs, spruce..... \$	—	124,624	184,323	60,529
5	Logs, all other, n.o.p..... \$	4,284	63,709	65,965	300
6	Masts and spars..... \$	4,566	148,468	154,767	208,838
7	Piling..... Lin.ft.	—	3,206	34,967	—
8	Poles, hop, hoop, telegraph and other.... \$	—	212,092	244,154	—
9	Posts, sleepers and railroad ties..... No.	—	139,154	140,320	—
		291	228,531	243,171	910,467
	Sawmill and planing mill products—				
10	Deals and deal ends..... M ft.	70,062	52,208	135,082	—
		3,682,438	1,350,321	5,547,243	—
11	Planks and boards..... M ft.	35,032	1,070,188	1,159,923	703,765
		1,128,285	30,898,609	34,057,271	26,996,484
12	Scantling..... M ft.	5,103	34,261	41,438	—
		161,939	863,173	1,100,899	—
13	Timber, square, Douglas fir..... M ft.	—	—	—	10,498
		—	—	—	330,695
14	Timber, square, white pine..... M ft.	—	—	—	9,557
		—	935	935	865,566
15	Timber, square, other, n.o.p..... \$	281,147	213,638	1,401,936	275,913
16	Other lumber, n.o.p..... \$	3,658,588	73,070	3,731,658	303,800
	Other sawmill and planing mill products—				
17	Doors, sashes and blinds..... \$	—	586	17,251	26,337
18	Knees and futtocks..... \$	—	104,904	105,451	—
19	Laths..... M	—	305,134	308,590	—
		—	1,009,888	1,023,588	—
20	Mouldings, trimmings, etc..... \$	2,562	3,541	9,056	131,734
21	Pickets..... \$	3,788	246,647	256,002	14,779
22	Shingles..... M	—	1,860,475	1,881,195	419
		—	5,951,980	5,995,353	2,722
23	Shooks..... \$	194,464	144,121	475,460	233,292
	Other unmanufactured wood—				
24	Firewood..... cord	—	14,477	14,673	—
		—	73,124	74,477	—
25	Pulpwood..... cord	—	1,597,042	1,597,042	—
		—	15,386,600	15,386,600	—
26	Other articles of the forest produce..... \$	—	24,269	24,269	—
	<b>Total wood and wood products, unmanufactured..... \$</b>	<b>9,182,051</b>	<b>57,366,207</b>	<b>70,389,333</b>	<b>30,265,982</b>
	Wood and wood products, manufactured—				
27	Cooperage, barrels, empty..... \$	—	46,529	50,540	300
28	Pails, tubs, churns and other hollow wood- enware..... \$	465	369	4,870	8,960
29	Staves and headings..... \$	11,184	101,551	133,262	80,095
	Wood pulp—				
30	Chemically prepared pulp..... cwt.	140,364	7,414,825	8,332,930	—
		611,399	26,256,265	30,226,856	—
31	Chemical pulp, sulphate (kraft)..... cwt.	—	—	—	1,086
		—	—	—	4,890
32	Chemical, sulphite, bleached..... cwt.	—	—	—	151,949
		—	—	—	610,189
33	Chemical pulp, sulphite, unbleached..... cwt.	—	—	—	693,136
		—	—	—	2,597,040
34	Mechanically ground pulp..... cwt.	2,528	3,453,149	3,508,726	1,938,225
		3,033	4,418,555	4,479,915	1,802,281
	Other manufactures of wood—				
35	Furniture..... \$	4,028	16,148	155,264	263,157
36	Handles, all kinds..... \$	—	—	—	61,271
37	Matches..... \$	1,576	3,336	113,405	191
38	Spool wood..... \$	54,212	42,298	96,635	796,655
39	All other manufactures of wood..... \$	158,709	257,778	656,658	599,239
40	Total wood manufactured..... \$	844,606	31,142,829	35,917,405	6,824,268
	<b>Total wood, wood products and paper..... \$</b>	<b>11,123,821</b>	<b>127,399,870</b>	<b>154,569,154</b>	<b>42,026,282</b>

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
163,926	163,926	—	158,915	158,915	—	38,020	38,020	1
22,477	22,861	—	19,326	19,561	—	56,440	77,932	2
526,377	547,815	—	476,643	484,097	—	1,004,228	1,469,695	3
166,669	228,598	95,504	219,791	320,775	40,200	111,899	152,099	4
170,728	181,263	284	187,924	192,545	—	411,534	415,354	5
650,205	861,407	305,004	346,785	652,514	5,936	706,080	729,413	6
1,069	26,404	—	140	23,426	25	36	5,272	7
1,145,135	1,188,995	—	1,964,795	2,022,764	—	1,068,281	1,102,430	8
112,804	118,656	—	251,950	275,434	—	116,884	122,699	9
204,066	209,286	—	487,424	490,359	—	743,999	751,679	10
325,512	1,235,979	912,136	1,401,269	2,545,251	—	511,040	1,214,411	11
289,909	1,104,802	1,303,196	1,396,580	3,273,714	—	510,157	1,071,892	12
—	—	—	—	—	—	—	—	13
1,301,565	2,085,262	428,059	1,061,977	1,604,463	113,223	933,862	1,158,630	14
44,874,541	75,216,193	20,449,773	45,107,422	71,079,295	5,346,363	30,637,830	39,012,295	15
—	—	—	—	—	—	—	—	16
693	26,078	3,391	3,723	34,892	1,851	3,171	46,934	17
18,194	777,177	169,459	105,824	1,293,524	42,038	55,125	1,147,410	18
114	9,671	1,961	77	2,042	1,339	—	1,797	19
2,338	867,904	215,631	3,585	219,653	177,814	—	203,247	20
83,263	503,081	246,297	53,757	319,559	75,103	45,490	300,518	21
47,481	360,487	114,035	136,241	291,683	159,984	355,667	555,027	22
5,102	81,654	79,550	8,103	212,087	39,224	2,140	119,346	23
42,634	42,760	—	8,180	8,706	—	4,986	4,986	24
820,971	827,341	7	414,067	428,644	12	961,170	971,070	25
3,633,363	3,668,511	65	3,636,924	3,767,830	90	6,038,779	6,092,657	26
2,855	145,178	42,741	16,174	75,328	1,294	1,388	7,094	27
312,303	343,492	11,315	539,512	576,483	2,760	243,799	263,114	28
2,086,773	2,106,373	32	1,796,865	1,831,659	241	2,217,474	2,231,904	29
10,775,018	10,848,602	199	9,058,127	9,230,581	1,054	7,592,181	7,632,418	30
180,279	517,417	203,072	90,262	1,068,390	52,857	53,974	602,740	31
15,348	15,859	—	29,025	29,368	—	12,097	12,257	32
61,743	65,454	—	116,471	118,973	—	82,742	83,712	33
838,732	838,732	—	1,615,467	1,615,467	—	825,967	825,967	34
8,454,803	8,454,803	—	21,513,594	21,513,594	—	9,879,150	9,879,150	35
18,550	18,550	—	37,010	37,010	2,003	54,435	95,159	36
70,897,220	105,353,420	23,236,125	83,957,338	115,684,475	5,946,741	58,690,473	70,799,996	37
4,631	22,851	200	45,661	52,934	3,896	28,296	48,549	38
2,965	43,884	9,920	15,531	49,701	3,377	17,297	22,824	39
58,761	156,311	29,945	105,699	198,356	470	19,742	26,687	40
—	—	—	—	—	—	—	—	41
2,437,996	2,518,022	—	2,328,839	2,354,002	—	2,373,760	2,377,556	42
7,997,016	8,327,045	—	12,046,063	12,160,735	—	7,880,357	7,906,872	43
876,959	1,220,764	27,906	1,606,834	1,941,922	1,697	1,703,400	1,859,501	44
4,683,160	6,291,452	264,581	12,820,526	15,195,065	13,740	7,440,411	8,325,617	45
3,515,781	4,863,156	835,891	3,531,184	4,785,040	346,179	2,140,573	2,861,470	46
12,870,706	18,381,566	4,160,567	21,583,349	27,704,419	1,291,656	6,561,128	9,236,296	47
4,045,385	6,787,640	1,397,783	3,268,653	5,282,042	1,787,778	3,297,127	5,336,710	48
5,765,871	8,383,419	3,472,454	11,552,473	16,491,818	5,218,426	4,713,491	10,456,092	49
24,666	563,379	271,729	57,939	804,064	9,122	89,657	230,124	50
44,774	133,585	22,095	86,076	137,988	22,347	205,233	239,555	51
8	74,965	1,856	9	121,157	—	—	88,998	52
57,189	853,844	764,203	99,328	863,531	804,401	32,900	840,529	53
648,490	1,471,486	494,678	914,118	2,051,819	831,521	554,824	1,556,838	54
32,158,237	44,703,787	9,492,228	59,326,772	75,832,487	8,198,956	27,543,336	38,978,972	55
153,686,140	213,913,944	36,761,384	216,011,556	284,561,478	15,664,295	148,065,672	179,925,887	56

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

No.		Principal articles by classes.	1919.			
			United Kingdom.	United States.	All Countries.	United Kingdom.
<b>V. Iron and its products.</b>						
1	Chromite (chromic iron).....	ton	-	15,639	15,693	-
		\$	-	372,767	372,767	-
2	Iron ore.....	ton	-	131,691	131,691	-
		\$	-	671,195	671,195	-
Agricultural implements—						
3	Cream separators and parts of.....	\$	-	40,886	185,910	80
4	Harvesters and binders.....	No.	5,436	29	8,363	700
		\$	986,454	5,085	1,524,442	132,301
5	Hay rakes.....	No.	81	13	1,859	111
		\$	2,807	465	78,262	3,876
6	Mowing machines.....	No.	1,218	15	11,571	442
		\$	78,118	946	760,688	29,869
7	Reapers.....	No.	-	-	457	10
		\$	-	-	39,573	1,090
8	Cultivators.....	No.	602	140	8,582	202
		\$	32,462	12,257	450,367	10,419
9	Drills.....	No.	8,379	111	11,172	495
		\$	763,854	6,686	1,091,992	57,856
10	Harrows.....	No.	3,053	739	10,396	2,197
		\$	89,227	28,965	227,769	62,060
11	Ploughs and parts of.....	\$	786,944	77,574	2,436,347	657,421
12	Seeders.....	\$	-	-	3,491	5,430
13	Garden and farm tools.....	\$	-	-	-	91,536
14	Spades and shovels.....	\$	-	-	-	38
15	Threshing machines, separators and parts of.....	\$	-	17,529	602,597	3,135
16	Other agricultural implements and machines.....	\$	289,046	33,989	516,151	43,785
17	Parts of agricultural implements and machines.....	\$	277,604	48,545	914,214	94,745
<b>Total agricultural implements.....</b>			<b>\$ 3,306,516</b>	<b>272,927</b>	<b>8,831,803</b>	<b>1,193,641</b>
Engines—						
18	Internal combustion engines and parts of.....	No.	1	90	1,479	341
		\$	627	28,504	290,797	811,877
19	Locomotives and parts of.....	No.	-	-	-	-
		\$	-	-	-	-
20	Steam engines and parts of.....	\$	-	-	-	-
Hardware and cutlery.—						
21	Bolts and nuts.....	cwt.	-	-	-	7,786
		\$	-	-	-	64,446
22	Cutlery.....	\$	-	-	-	2,011,989
23	Hardware, n.o.p.....	\$	901,418	439,985	2,631,893	578,620
24	Nails, brads, spikes and tacks, all kinds..	cwt.	-	-	-	67,420
		\$	-	-	-	388,145
25	Nails, wire.....	cwt.	268,527	39,189	762,898	173,682
		\$	1,679,334	213,170	4,898,885	919,226
26	Needles and pins, all kinds.....	\$	-	-	-	12,386
27	Screws, all kinds.....	\$	-	-	-	36,228
<b>Total hardware and cutlery.....</b>			<b>\$ 2,580,752</b>	<b>653,155</b>	<b>7,530,778</b>	<b>4,011,040</b>
Machinery (except agricultural)—						
28	Adding and calculating machines.....	\$	-	-	-	-
29	Lawn mowers.....	No.	-	-	-	7,437
		\$	-	-	-	42,189
30	Linotype machines and parts of.....	\$	-	6,995	11,087	-
31	Sewing machines and parts of.....	\$	31,572	138,346	182,514	71,796
32	Typewriters.....	No.	3,413	65	4,035	2,318
		\$	208,229	10,353	256,285	184,046
33	Washing machines, domestic, and wringers	\$	15	137	13,172	36,306
34	Other machinery and parts of, n.o.p.....	\$	131,018	5,247,911	5,983,142	497,174
<b>Total machinery (except agricul- tural).....</b>			<b>\$ 370,834</b>	<b>5,403,742</b>	<b>6,445,200</b>	<b>831,511</b>

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
6,845	6,845	—	8,246	8,246	—	1,750	1,750	1
127,396	127,396	—	151,769	151,769	—	21,201	21,201	2
7,485	7,485	—	17,972	17,972	20	4,765	4,785	3
32,421	32,421	—	93,197	93,197	100	16,058	16,158	4
125,875	259,519	2,635	78,675	157,208	618	41,175	192,432	5
2,071	14,674	1,486	1,835	13,413	342	6	2,161	6
437,222	2,898,000	300,889	389,928	2,826,657	70,708	2,549	449,013	7
17	1,813	240	283	3,815	192	1	1,229	8
636	62,630	8,358	22,712	168,453	7,771	25	49,239	9
16	13,176	1,102	2,580	13,766	443	39	4,943	10
1,110	854,831	78,367	209,472	1,005,453	35,832	2,277	369,762	11
—	1,691	25	—	1,761	—	—	115	12
900	169,353	2,996	—	204,381	—	—	12,901	13
78,714	7,326	102	892	7,160	18	316	3,005	14
125	442,214	6,476	94,273	488,133	965	28,324	180,158	15
19,675	2,880	80	30	2,974	—	25	3,168	16
1,243	328,941	10,117	4,237	421,847	—	3,443	499,700	17
48,648	9,124	1,059	726	11,809	448	245	3,742	18
670,695	325,211	19,208	43,878	355,339	10,757	19,015	134,063	19
—	2,493,714	441,786	1,199,839	3,628,386	73,956	253,720	1,465,919	20
—	38,972	—	1,267	27,291	—	313	5,141	21
8,892	325,281	82,735	706	289,679	44,653	550	95,504	22
66,309	268,118	562	116,909	255,001	33	35,253	195,555	23
1,597,498	1,975,549	4,038	804,648	818,052	—	131,741	688,609	24
35,142	244,038	91,903	76,441	514,313	34,145	19,386	221,843	25
191,572	928,029	133,006	396,164	1,367,180	92,204	45,234	785,469	26
3,281,988	11,614,400	1,183,076	3,439,149	12,527,373	371,642	583,005	5,345,308	27
42	3,168	109	81	718	38	326	649	28
9,263	1,201,847	120,434	48,490	262,775	118,169	40,789	220,555	29
10	150	—	2	68	—	3	35	30
97,175	6,606,233	—	27,960	3,472,594	—	3,487	1,207,411	31
—	—	—	—	—	—	3,811	52,190	32
937	11,839	15,858	4,012	32,197	2,974	847	9,127	33
12,033	110,554	174,555	29,302	344,877	17,638	5,751	69,414	34
651	2,720,920	1,435,093	9,342	1,535,106	560,956	1,465	804,709	35
53,087	885,410	133,944	145,733	697,983	4,350	32,600	89,554	36
14,247	145,349	17,587	10,182	87,633	400	2,258	14,152	37
95,168	883,781	137,479	75,745	677,172	5,128	19,567	105,708	38
204,041	550,014	303,762	144,574	604,713	2,122	5,039	23,267	39
1,098,339	2,945,137	1,907,864	938,777	3,871,470	14,680	36,655	123,696	40
65,841	124,422	1,774	53,047	85,335	286	39,049	46,594	41
565	60,602	76,452	664	120,098	30	163	13,449	42
1,325,684	7,730,826	3,867,161	1,254,610	7,332,041	603,058	135,250	1,253,124	43
—	—	71,907	5,208	396,507	45,038	3,877	126,199	44
—	8,005	20,838	1	21,952	3,423	1	4,012	45
—	46,451	110,599	5	120,229	20,222	6	26,819	46
25,794	27,476	5,000	3,998	20,210	—	17,051	19,126	47
93,403	725,853	117,358	99,670	896,988	76,176	112,485	715,569	48
52	3,245	2,406	49	3,978	1,480	38	2,631	49
7,158	260,627	203,080	5,571	332,720	119,684	3,010	201,920	50
12,003	56,569	182,278	3,843	195,079	17,560	1,536	22,685	51
3,974,727	5,299,615	734,474	1,935,735	3,807,755	406,812	557,233	1,468,700	52
4,113,085	6,416,591	1,424,696	2,051,020	5,769,488	685,492	695,198	2,581,018	53



11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>V. Iron and its products—concluded.</b>					
1	Rolling mill products—				
	Bars and rods..... ton	2,878	11,838	92,995	24,483
	\$	172,398	759,450	7,844,004	1,375,212
2	Rails..... ton	—	8,503	12,978	—
	\$	—	282,752	624,257	—
3	Metallic shingles and laths and corrugated roofing..... \$	3,261	431	17,680	92
4	Structural steel..... ton	—	—	—	—
	\$	—	—	—	—
5	Tubing and pipe..... \$	—	—	—	439,882
	<b>Total rolling mill products..... \$</b>	<b>175,659</b>	<b>1,042,633</b>	<b>8,485,941</b>	<b>1,815,186</b>
6	Smelted products—				
	Billets, ingots and blooms..... ton	13	29,123	51,164	26,415
	\$	638	1,203,045	2,270,721	1,213,061
7	Ferro-silicon, etc..... ton	12,546	7,453	21,624	2,255
	\$	1,898,030	586,006	2,620,923	147,317
8	Pig iron..... ton	—	1,677	4,882	—
	\$	—	45,604	313,500	—
	<b>Total, smelted products..... \$</b>	<b>1,898,668</b>	<b>1,834,655</b>	<b>5,205,144</b>	<b>1,360,378</b>
9	Vehicles, chiefly of iron—				
	Automobiles, freight..... No.	—	7	2,587	425
	\$	—	7,500	1,313,770	426,849
10	Automobiles, passenger..... No.	1,472	52	11,613	807
	\$	713,920	39,295	5,989,908	967,465
11	Automobiles, parts of..... \$	8,708	282,273	1,552,296	1,933,265
12	Bicycles and parts of..... \$	—	3,226	105,375	20,176
13	Cars and coaches, railway, and parts of.. \$	—	—	—	—
14	Other vehicles, n.o.p..... \$	884,600	266,204	13,776,252	2,795
	<b>Total vehicles, chiefly of iron..... \$</b>	<b>1,607,228</b>	<b>598,498</b>	<b>22,737,601</b>	<b>3,350,559</b>
15	Wire—				
	Wire, barbed..... cwt.	—	—	21,276	5,603
	\$	—	—	138,857	20,958
16	Wire, woven fencing..... \$	16,507	9,394	40,406	50,410
17	Other wire, n.o.p..... \$	315,497	124,370	2,711,040	857,604
	<b>Total wire..... \$</b>	<b>332,004</b>	<b>133,764</b>	<b>2,890,303</b>	<b>938,972</b>
18	Other iron and steel products—				
	Castings, n.o.p..... \$	—	434,195	448,087	4,648
19	Forgings..... \$	—	—	—	2,372
20	Furniture..... \$	—	—	—	16,141
21	Guns, rifles and firearms, all kinds..... \$	100,795	1,229,653	1,860,279	2,283
22	Lamp and lanterns..... \$	13,394	16,910	91,325	83,237
23	Scales and weighing beams..... \$	—	—	—	22,271
24	Scrap iron and steel..... \$	—	1,277,131	1,282,825	778,132
25	Stoves, all kinds..... \$	6,027	24,154	87,275	24,163
26	Tinware..... \$	3,381	2,412	210,002	12,714
27	Tools, hand or machine, n.o.p..... \$	583,600	815,612	2,132,671	136,522
28	Other manufactures of iron and steel, n.o.p. \$	336,368	7,884,738	12,335,933	478,519
	<b>Total iron and its products..... \$</b>	<b>11,315,853</b>	<b>22,696,645</b>	<b>81,910,926</b>	<b>15,874,157</b>
<b>VI. Non-ferrous metals and their products.</b>					
29	Aluminium in bars, blocks, etc..... cwt.	76,612	61,441	202,839	54,669
	\$	2,505,444	2,078,641	6,712,053	1,609,310
30	Aluminium, manufactures of..... \$	5,990	138,413	189,704	1,372
31	Brass and its products—				
	Brass, old and scrap..... cwt.	—	72,685	72,865	—
	\$	—	1,148,819	1,148,819	—
32	Brass rods, sheets, tubing, etc..... cwt.	18,803	12,303	38,188	75
	\$	508,860	313,609	1,033,961	2,680
33	Brass valves..... \$	—	—	—	86,349
34	Brass, mfs. of, n.o.p..... \$	—	—	—	—
	<b>Total brass and its products..... \$</b>	<b>508,860</b>	<b>1,462,428</b>	<b>2,182,780</b>	<b>89,029</b>

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
10,911	52,503	39,885	4,178	69,340	94	324	5,432	1
582,213	3,012,635	2,597,318	293,715	4,872,203	20,095	19,231	277,096	2
12,245	34,945	—	40,267	55,852	—	16,742	16,833	3
484,869	1,482,643	—	1,595,714	2,447,854	—	685,442	689,103	4
433	32,217	—	9,489	72,877	5	165	5,208	5
5,000	6,716	—	1,600	3,585	—	229	1,235	6
377,492	575,943	—	172,015	424,165	—	17,892	152,770	7
241,799	2,325,369	345,553	137,224	3,106,170	354,639	16,939	1,232,039	8
1,686,806	7,425,897	2,942,871	2,298,157	10,923,269	374,739	744,224	2,498,447	9
21,408	49,606	49,137	1,787	50,925	—	16	16	10
1,409,614	2,717,220	2,809,015	103,425	2,912,471	—	912	11,083	11
18,435	25,776	1,344	16,748	21,045	421	10,187	568,583	12
863,240	1,223,635	82,364	833,748	1,059,576	27,097	506,407	2,511	13
88,625	93,541	18,902	51,221	70,160	224	2,287	53,424	14
2,495,853	2,654,833	779,413	1,852,581	2,634,153	4,205	49,219	—	15
4,768,707	6,595,688	3,670,792	2,789,754	6,696,200	31,362	556,538	622,919	16
13	4,133	619	4	4,290	97	8	1,296	17
32,510	2,211,342	643,344	3,750	2,602,853	45,496	8,450	611,185	18
83	20,373	1,358	796	15,620	2,804	100	13,428	19
62,463	12,672,265	1,422,548	1,037,386	11,376,268	1,810,384	57,902	7,421,619	20
352,471	3,097,466	86,137	1,870,093	4,262,325	363,160	116,129	1,151,453	21
4,688	139,084	26,300	2,559	229,428	492	900	9,704	22
18,218	1,702,052	—	18,487	953,339	—	300,625	2,777,735	23
113,673	173,505	36,671	277,112	395,902	3,299	126,493	142,151	24
584,023	19,995,714	2,215,000	3,209,387	19,820,115	2,222,831	610,499	12,113,847	25
189	13,946	—	2	19,513	—	—	11,458	26
639	77,649	—	12	134,187	—	—	42,832	27
9,712	95,241	105,793	8,742	144,167	28,527	222	41,852	28
277,873	1,625,334	629,062	487,576	1,992,797	77,389	3,627	242,887	29
288,224	1,798,224	734,855	496,330	2,271,151	105,916	3,849	327,571	30
382,877	401,455	19,813	806,976	845,736	2,718	171,055	197,647	31
1,867,176	1,871,799	17,306	846,239	863,545	1,924	50,932	52,856	32
1,086	50,475	41,078	2,567	114,247	32,346	3,029	57,488	33
1,865,590	1,868,477	26,674	3,869	31,207	1,101	1,569	11,405	34
7,637	103,401	26,014	7,252	67,907	44,472	1,507	58,031	35
32,534	106,801	14,413	21,915	113,116	5,791	14,306	84,442	36
3,489,794	4,300,663	150,677	1,251,787	1,442,747	187	7,090	706,510	37
42,886	152,187	12,186	34,793	141,161	8,197	24,212	62,108	38
2,453	42,961	4,556	55,944	73,445	1,128	5,245	28,183	39
81,228	661,651	143,139	75,863	538,967	93,584	112,811	336,004	40
1,629,088	2,677,812	1,039,085	750,375	3,038,691	43,013	211,159	516,642	41
25,717,121	81,785,829	17,653,826	19,630,413	76,500,741	4,758,888	4,693,620	28,312,272	42
120,073	192,069	36,288	98,678	140,051	323	30,365	60,306	43
3,562,112	5,680,871	1,154,260	3,138,471	4,417,999	6,767	577,153	1,188,908	44
53,778	64,364	2,037	29,119	228,820	290	14,293	322,799	45
91,451	91,512	107	21,335	21,442	—	33,853	33,930	46
1,216,263	1,217,940	1,176	270,432	271,609	—	199,752	200,214	47
3,982	5,013	30	30	82	63	30	93	48
101,467	133,829	1,200	1,681	3,428	1,972	398	2,370	49
88,585	292,388	146,490	2,675	324,001	89,314	1,601	133,871	50
—	—	—	—	—	5,198	7,652	19,329	51
1,406,315	1,644,157	148,866	274,789	599,038	96,484	209,403	355,784	52

# 11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>VI. Non-ferrous metals and their products—concluded.</b>					
	Copper and its products—				
1	Copper, fine, contained in ore, matte, cwt. regulus, etc. \$	106,055	550,069	656,124	25,634
		818,830	7,865,361	8,684,191	192,244
2	Copper, blister, bars, sheets, wire, etc., and mfs. of, n.o.p. \$	—	11,674,317	11,716,083	287,607
3	Copper, pig, old and scrap. cwt. \$	—	31,983	31,983	20,705
		—	590,905	590,905	386,786
	<b>Total copper and its products..... \$</b>	<b>818,830</b>	<b>20,130,583</b>	<b>20,991,179</b>	<b>866,637</b>
Lead and its products—					
4	Lead, metallic, contained in ore, etc. cwt. \$	—	225,511	225,511	—
		—	1,286,080	1,286,080	—
5	Lead in pigs, etc. cwt. \$	9,470	11,441	27,908	71,416
		69,303	83,469	368,867	537,551
	<b>Total lead and its products..... cwt. \$</b>	<b>9,470</b>	<b>236,952</b>	<b>253,419</b>	<b>71,416</b>
		<b>69,303</b>	<b>1,369,549</b>	<b>1,654,947</b>	<b>537,551</b>
Nickel, cobalt and their products—					
6	Cobalt metallic. lb. \$	43,255	217,849	287,735	176,495
		105,421	568,688	740,686	193,252
7	Cobalt, alloys. lb. \$	38,824	1,302	57,068	4,858
		158,376	5,792	231,960	17,240
8	Nickel, fine, contained in ore, matte or speiss. cwt. \$	104,601	655,288	759,889	60,203
		1,540,803	8,444,716	9,985,519	1,226,883
9	Nickel, fine. cwt. \$	18,845	915	31,755	2,240
		693,743	31,395	1,184,820	78,400
	<b>Total nickel and its products..... \$</b>	<b>2,498,343</b>	<b>9,050,591</b>	<b>12,143,015</b>	<b>1,515,775</b>
Precious metals and their products—					
10	Gold bearing quartz, nuggets, etc. \$	—	9,201,983	9,202,033	—
11	Silver contained in ore, concentrates, etc. oz. \$	—	3,973,695	3,973,695	125,220
		—	3,677,313	3,677,313	152,154
12	Silver bullion. oz. \$	10,243,363	3,851,300	15,785,783	3,232,951
		10,241,434	3,862,640	15,842,329	3,653,042
13	Other articles. \$	18,000	358,108	376,108	36,350
	<b>Total precious metals and their products..... \$</b>	<b>10,259,434</b>	<b>17,100,044</b>	<b>29,097,783</b>	<b>3,841,546</b>
14	Zinc and its products. \$	—	449,713	449,713	403,483
15	Electric apparatus. \$	31,869	433,392	2,167,545	110,881
16	Other non-ferrous metal products. \$	2,252,370	1,039,260	3,672,013	284,985
	<b>Total non-ferrous metals and their products..... \$</b>	<b>18,950,443</b>	<b>53,252,514</b>	<b>79,250,732</b>	<b>9,250,569</b>
<b>VII. Non-metallic minerals and their products.</b>					
17	Clay and clay products. \$	1,020	157,106	171,944	11,150
Coal and its products—					
18	Coal. ton \$	147,062	1,201,395	1,826,639	180,685
		1,069,395	6,114,931	10,169,722	1,651,188
19	Coke. ton \$	—	26,761	26,971	—
		—	211,967	214,228	—
20	Tar and pitch. gal. \$	—	—	—	—
		—	—	—	—
21	Cinders. \$	—	810	810	—
	<b>Total coal and its products..... \$</b>	<b>1,069,395</b>	<b>6,327,708</b>	<b>10,384,760</b>	<b>1,651,188</b>
22	Graphite and its products. \$	7	195,816	195,934	212
23	Mica and its products. \$	55,051	312,603	369,577	53,411
Petroleum and its products—					
24	Oil, coal and kerosene, refined. gal. \$	1,525,753	628,825	2,742,047	503,287
		144,844	61,079	273,633	40,677
25	Oil, coal and kerosene, crude. gal. \$	13,940	200,598	221,336	510,158
		2,594	20,535	24,011	32,712
26	Oil, mineral, n.o.p. gal. \$	4,164	979,338	1,081,389	—
		1,054	219,207	250,785	—

11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—*CON.*

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
394,399 5,060,974	420,033 5,253,218	87,042 653,780	274,637 3,683,192	361,679 4,336,972	50,870 382,451	52,469 646,966	103,339 1,029,417	1
6,727,207 11,336 165,571	8,065,027 32,554 561,087	635,512 — —	7,664,391 5,289 76,814	8,900,303 5,289 70,814	35,040 — —	4,352,690 23,876 221,662	4,720,157 50,857 579,531	2 3
11,953,752	13,879,332	1,289,292	11,424,397	13,314,089	417,491	5,221,318	6,329,105	
107,894 506,789 16,679 72,240	107,894 506,789 102,013 686,355	— — — —	74,603 358,978 1 17	74,603 358,978 36,505 166,678	— — 78,912 369,083	44,867 175,781 37 157	44,867 175,781 364,312 1,543,186	4 5
124,573 572,092	209,907 1,193,144	— —	74,604 358,995	111,108 525,656	78,912 339,083	44,904 175,938	409,179 1,718,967	
82,728 193,844 267 1,156 258,646 3,918,315 117,172 3,615,122	260,343 389,896 5,441 19,663 316,849 5,145,198 124,558 3,894,023	22,459 62,889 9,929 49,160 111,188 1,899,696 1,209 42,784	118,853 276,372 1,120 5,374 293,785 5,259,977 43,437 1,522,994	142,432 342,061 11,049 54,534 408,337 7,233,925 61,846 2,171,866	— — 5,754 31,511 55,366 930,677 5 153	32,818 98,222 — — 6,505 120,900 22,407 780,345	59,410 141,134 7,078 38,369 62,943 1,076,192 46,104 1,613,510	6 7 8 9
7,728,437	9,448,780	2,054,529	7,064,717	9,801,886	962,341	999,467	2,839,205	
5,378,289 2,437,266 2,629,453 2,457,873 2,779,067 272,720	5,974,334 2,562,584 2,781,705 9,817,058 11,473,896 309,070	195 — — 5,336,464 4,401,852 1,000	3,036,084 2,441,270 1,870,244 2,254,931 1,726,602 381,355	3,038,779 2,441,270 1,870,244 10,889,780 9,257,188 382,355	326 — — 5,610,024 3,634,297 200	2,531,724 3,211,653 2,031,383 3,558,371 2,241,301 283,039	2,532,050 3,211,653 2,031,383 10,839,767 6,679,921 284,209	10 11 12 13
11,057,529	20,539,005	4,403,047	7,014,285	14,548,566	3,634,823	7,087,447	11,527,563	
238,841 222,115 744,035	950,082 424,476 1,152,202	292,146 341,003 188,336	86,129 139,237 499,660	963,962 651,461 887,900	189,499 152,731 168,097	2,477 97,897 301,867	2,448,741 485,321 639,603	14 15 16
37,545,943	54,973,413	9,873,516	30,029,799	45,929,377	5,997,576	14,687,280	27,885,996	
196,195 1,071,772 5,700,441 17,773 161,386 955,958 46,402 375	220,744 2,120,138 13,183,686 17,872 162,481 2,644,417 94,202 375	4,678 81,477 941,299 — — 2,644,417 — —	240,128 1,031,870 6,287,861 37,790 399,620 738,035 50,400 105	323,989 2,277,202 16,501,478 38,031 402,435 8,622,210 571,773 105	1,894 350,014 2,720,872 — — 24 10 —	91,746 1,188,326 7,095,769 26,647 300,003 965,921 61,137 316	257,624 1,953,053 13,182,440 26,671 300,457 2,307,528 248,155 316	17 18 19 20 21
5,908,604	13,440,724	941,299	6,737,986	17,475,791	2,720,882	7,457,225	13,731,368	
113,867 566,463	114,105 774,369	1,892 45,050	118,501 611,023	120,473 660,218	85 21,826	41,057 205,444	41,149 230,429	22 23
1,175,189 170,764 607,895 40,666 109,965 25,744	2,757,581 351,890 1,289,259 84,373 165,033 53,593	— — 292,936 32,135 140 95	215,214 27,219 1,154,627 144,164 91,476 19,929	553,566 79,625 2,424,142 295,734 190,036 87,326	— — 1,493,682 98,503 77 73	2,407 656 2,462,005 139,201 421,965 70,090	1,482,560 209,930 7,435,539 424,533 473,963 93,225	24 25 26



# 11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>VII. Non-metallic minerals and their products—concluded.</b>					
Petroleum and its products—con.					
1	Oil, gasoline and naphtha..... gal.	43	375	361,081	86
	\$	15	171	106,464	30
2	Wax, mineral..... cwt.	17,612	29,411	61,709	29
	\$	168,227	332,743	620,960	253
	<b>Total petroleum and its products... \$</b>	<b>316,734</b>	<b>633,735</b>	<b>1,275,853</b>	<b>73,672</b>
Stone and stone products—					
3	Abrasives..... \$	—	2,162,420	2,168,132	8,288
4	Building and paving stone..... \$	—	116,800	118,873	—
5	Cement..... cwt.	—	—	—	—
	\$	—	2,890	15,945	—
6	Gypsum or plaster, crude..... ton	—	69,019	69,034	—
	\$	—	81,784	82,047	—
7	Lime..... cwt.	—	155,735	155,877	20
	\$	—	66,919	67,052	25
8	Plaster of Paris, ground, etc..... \$	2,123	122,245	129,795	132
9	Sand and gravel..... ton	—	897,851	897,851	—
	\$	—	228,012	228,012	—
10	Other stone products..... \$	—	2,692	2,692	681
	<b>Total stone and stone products... \$</b>	<b>2,123</b>	<b>2,783,462</b>	<b>2,812,548</b>	<b>9,126</b>
Asbestos products—					
11	Asbestos..... ton	10,594	104,041	125,361	7,594
	\$	899,559	6,890,724	8,910,210	768,456
12	Asbestos sand and waste..... ton	—	23,726	23,883	—
	\$	—	246,831	247,812	—
13	Asbestos, manufactures of..... \$	—	5,402	45,146	5,201
	<b>Total asbestos products... \$</b>	<b>899,559</b>	<b>7,142,957</b>	<b>9,203,168</b>	<b>773,657</b>
Miscellaneous non-metallic minerals—					
14	Feldspar..... ton	—	—	—	160
	\$	—	116,346	116,349	544
15	Glass and glassware, n.o.p..... \$	724	12,112	36,145	459,082
16	Magnesite, crude, refined, etc..... \$	26	796,236	796,262	55,679
17	Pyrites and sulphur contained in pyrites.. ton	—	237,582	237,582	—
	\$	—	944,267	944,267	—
18	Talc, crude and refined..... \$	—	206,378	210,531	1,570
19	Other non-metallic minerals and products \$	10	129,416	144,966	31,866
	<b>Total non-metallic minerals and their products... \$</b>	<b>2,344,649</b>	<b>19,758,145</b>	<b>26,662,304</b>	<b>3,121,157</b>
<b>VIII. Chemicals and allied products.</b>					
20	Acids..... \$	—	75,793	75,857	370,308
21	Dyes and tanning materials..... \$	9,000	10,100	30,190	48,900
22	Explosives and cellulose products, n.o.p. \$	16,675,173	19,289,483	37,506,294	385,281
Fertilizer—					
23	Ammonia sulphate..... cwt.	—	8,760	206,319	16,853
	\$	—	58,101	1,231,524	73,383
24	Cyanamid..... cwt.	—	1,037,569	1,037,569	—
	\$	—	2,857,446	2,857,446	—
25	Other fertilizers, manufactured, n.o.p..... \$	5	199,435	232,067	—
	<b>Total fertilizers... \$</b>	<b>5</b>	<b>3,114,982</b>	<b>4,321,037</b>	<b>73,383</b>
26	Paints, pigments and varnishes..... \$	205,869	218,026	1,800,025	748,092
27	Soap..... \$	455,877	529	560,025	219,165
Inorganic chemicals, n.o.p.—					
28	Acetate of lime..... cwt.	28,415	4,405	43,286	77,292
	\$	145,340	8,551	203,084	208,418
29	Calcium carbide..... cwt.	153,979	947,710	1,183,762	151,689
	\$	578,126	3,685,436	4,720,783	627,721
30	Cobalt oxide and cobalt salts..... lb.	172,948	307,073	640,303	163,236
	\$	249,523	381,058	908,659	263,200
31	Soda and sodium compounds <sup>1</sup> ..... lb.	—	—	—	—
	\$	—	—	—	—

<sup>1</sup> Included in other chemicals, n.o.p., 1919-21.

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
629,193	1,311,996	—	227,954	349,883	—	16,895	569,436	1
154,796	356,376	—	58,719	100,547	—	5,337	160,850	2
45,276	49,840	8,963	9,210	22,231	—	6	48	
351,283	384,005	83,917	75,717	194,642	—	123	343	
<b>742,983</b>	<b>1,230,237</b>	<b>116,147</b>	<b>318,319</b>	<b>766,924</b>	<b>98,576</b>	<b>215,407</b>	<b>888,881</b>	
1,458,076	1,474,177	16,424	1,901,681	1,946,601	1,289	477,496	487,755	3
38,446	46,206	5,265	37,936	48,712	50	22,586	46,383	4
—	—	300	1,869,609	2,811,127	—	23,391	810,448	5
23,680	660,884	197	1,148,476	2,107,180	—	24,481	578,474	6
164,714	164,714	—	253,098	253,098	—	222,671	222,671	7
229,521	229,521	—	427,053	427,053	—	404,987	404,987	8
194,414	201,923	—	475,801	477,537	—	227,607	231,493	9
147,661	155,212	—	409,253	411,683	—	217,991	222,805	10
131,556	141,870	—	163,664	222,015	—	40,625	67,166	
1,075,283	1,075,323	—	1,503,575	1,503,607	—	1,386,004	1,386,034	
133,675	133,920	—	193,113	193,163	—	200,994	201,094	
19,971	20,652	—	54,111	54,111	—	5,357	5,357	
<b>2,182,592</b>	<b>2,862,442</b>	<b>21,886</b>	<b>4,335,290</b>	<b>5,410,518</b>	<b>1,339</b>	<b>1,394,526</b>	<b>2,014,021</b>	
84,224	105,694	12,467	113,985	154,152	2,288	47,178	63,287	11
6,506,625	8,532,027	1,337,357	8,036,276	12,255,793	311,357	2,397,609	4,397,332	12
23,508	23,508	155	36,827	37,147	21	24,376	24,446	13
235,829	235,829	3,025	370,721	377,596	189	235,151	235,868	
10,119	232,316	16,669	72,856	321,694	2,722	93,823	153,830	
<b>6,752,577</b>	<b>9,000,172</b>	<b>1,357,051</b>	<b>8,479,853</b>	<b>12,955,083</b>	<b>314,286</b>	<b>2,726,583</b>	<b>4,787,030</b>	
24,198	24,358	—	41,272	41,312	1	22,553	22,584	14
121,785	122,329	—	248,051	249,854	30	146,756	147,866	15
38,018	914,447	409,314	230,239	935,575	86,417	96,603	266,054	16
228,971	295,395	221,395	127,330	355,747	5,051	17,210	23,066	17
83,640	83,640	—	119,106	119,106	—	7,875	7,875	18
375,174	375,174	—	458,340	458,340	—	31,500	31,500	19
232,886	235,457	—	201,286	202,923	—	138,672	138,949	
28,151	757,331	8,626	164,098	206,457	3,059	42,309	58,747	
<b>17,488,266</b>	<b>30,342,926</b>	<b>3,127,338</b>	<b>22,270,447</b>	<b>49,121,892</b>	<b>3,253,427</b>	<b>12,605,632</b>	<b>22,616,684</b>	
260,452	901,397	419,630	310,015	1,069,667	20,939	66,558	90,116	20
558	58,240	31,300	202	33,957	28,868	15,109	46,944	21
4,070,595	4,675,047	—	627,401	1,271,702	—	199,831	249,789	22
32,042	431,362	7,082	20,752	300,013	2,801	93,258	338,066	23
156,322	2,065,106	40,726	96,144	1,519,262	7,809	204,543	785,187	24
1,277,319	1,277,319	—	882,524	883,127	—	357,695	357,695	25
4,422,797	4,422,797	—	3,015,645	3,018,057	—	903,233	903,233	
200,637	206,134	—	451,253	455,857	—	522,004	524,931	
<b>4,779,756</b>	<b>6,694,637</b>	<b>40,726</b>	<b>3,563,042</b>	<b>4,993,176</b>	<b>7,809</b>	<b>1,629,789</b>	<b>2,213,351</b>	
126,901	1,625,418	934,409	154,055	1,756,045	162,903	89,908	423,604	26
3,886	1,000,722	24,260	2,474	143,627	138,882	3,517	227,788	27
30,069	133,948	53,147	10,755	80,922	—	13,130	22,109	28
59,636	319,182	178,529	30,087	261,578	—	15,561	28,373	29
632,399	882,510	27,088	973,177	1,086,138	—	478,885	513,650	30
2,504,627	3,599,899	110,390	4,159,844	4,618,335	4	2,122,033	2,261,054	31
201,447	507,693	171,599	140,115	415,764	11,212	164,717	302,386	
298,708	797,489	399,420	306,352	891,045	23,549	339,747	538,083	
—	—	—	—	—	11,219	11,325,198	19,677,573	
—	—	—	—	—	365	840,443	1,491,018	

# 11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
	<b>VIII. Chemicals and allied products—concluded.</b>				
	Inorganic chemicals, n.o.p.—concluded.				
1	Other inorganic chemicals..... \$	25,485	357,855	408,048	11,189
	<b>Total inorganic chemicals, n.o.p.... \$</b>	<b>995,474</b>	<b>4,432,920</b>	<b>6,266,069</b>	<b>1,110,528</b>
2	Other chemicals, n.o.p..... \$	1,832,457	3,529,767	6,240,302	640,279
	<b>Total chemicals and allied products \$</b>	<b>20,176,855</b>	<b>30,671,606</b>	<b>56,799,799</b>	<b>3,595,936</b>
	<b>IX. All other commodities.</b>				
3	Amusement and sporting goods..... \$	39,680	40,788	139,374	122,859
4	Containers—Packages, all kinds, empty.... \$	30,280	87,621	187,345	6,243
	Household and personal equipment—				
5	Brooms and whisks..... \$	—	35	24,530	73,244
6	Jewellery, all kinds, n.o.p..... \$	6,402	17,686	96,330	206,046
7	Stationery..... \$	39,300	16,359	218,791	140,899
8	Other articles..... \$	75	68,008	160,538	50,662
	<b>Total household and personal equipment..... \$</b>	<b>45,777</b>	<b>102,088</b>	<b>500,189</b>	<b>470,851</b>
9	Mineral waters..... \$	—	37,226	42,919	1,190
	Musical instruments—				
10	Organs..... No.	—	15	236	261
	..... \$	—	36,844	52,071	19,747
11	Pianos..... No.	—	100	301	188
	..... \$	—	28,332	72,496	55,724
12	Other and parts of..... \$	12,972	39,733	146,567	98,282
	<b>Total musical instruments..... \$</b>	<b>12,972</b>	<b>104,909</b>	<b>271,134</b>	<b>173,753</b>
	Scientific and educational equipment—				
13	Cameras..... \$	—	—	—	127,886
14	Films for photographers' use and for moving pictures..... \$	130,953	1,045,270	1,302,886	375,101
15	Philosophical and scientific apparatus and instruments..... \$	159,954	269,491	580,149	167,332
	<b>Total..... \$</b>	<b>290,907</b>	<b>1,314,761</b>	<b>1,883,035</b>	<b>670,319</b>
	Ships and vessels—				
16	Boats, canoes and parts of..... \$	—	31,276	56,649	14,099
17	Gasoline launches..... No.	—	2	6	5
	..... \$	—	5,800	8,382	2,175
18	Ships sold to other countries..... ton	35,023	436	50,867	49,144
	..... \$	15,599,625	179,900	21,423,349	19,812,000
	<b>Total ships and vessels..... \$</b>	<b>15,599,625</b>	<b>216,976</b>	<b>21,488,380</b>	<b>19,828,274</b>
	Vehicles, chiefly of wood—				
19	Aeroplanes and parts of..... \$	1,294,152	3,192,086	4,530,268	—
20	Buggies, carriages and parts, carts and wagons..... \$	213	4,227	65,334	36,830
	<b>Total vehicles, chiefly of wood..... \$</b>	<b>1,294,365</b>	<b>3,196,313</b>	<b>4,595,602</b>	<b>36,830</b>
21	Paintings..... \$	4,125	333,261	340,426	23,642
	All other commodities, n.o.p.—				
22	Brushes, all kinds..... \$	3,843	3,215	93,489	43,344
23	Cartridges, gun, rifle and pistol..... \$	152,882,900	37,855,417	213,432,531	83,264
24	Contractors' outfits..... \$	—	215,720	217,196	—
25	Junk, except metallic and rubber..... cwt.	—	29,147	29,147	—
	..... \$	—	185,480	185,480	—
26	Settlers' effects..... \$	74,020	4,249,831	4,391,278	788,967
27	Other miscellaneous..... \$	3,975,912	915,317	7,558,088	579,459
	<b>Total, all other commodities..... \$</b>	<b>174,254,406</b>	<b>48,858,923</b>	<b>255,326,463</b>	<b>22,828,995</b>
	<b>Total exports, Canadian mdse..... \$</b>	<b>540,750,977</b>	<b>454,873,170</b>	<b>1,216,443,806</b>	<b>489,152,637</b>

**11.—Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1919-1922.—concluded.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
420,334	501,761	16,800	250,759	351,537	4,877	156,657	223,168	1
3,343,305	5,218,331	705,139	4,747,042	6,122,495	28,795	3,474,491	4,541,696	
1,217,614	2,407,857	1,070,483	2,290,627	4,191,382	551,333	457,920	1,477,109	2
13,803,067	22,581,049	3,225,947	11,694,858	19,582,051	939,529	5,937,114	9,271,027	
50,584	191,868	32,569	32,323	98,631	8,069	27,891	52,912	3
8,486	39,791	—	16,063	27,959	9,280	74,677	107,571	4
145	96,640	22,829	161	57,327	9,096	85	24,657	5
15,715	316,862	140,392	20,832	282,690	23,901	8,174	80,021	6
20,070	276,224	105,135	22,613	305,662	53,710	16,170	163,745	7
159,977	285,182	22,476	212,054	326,209	3,983	132,379	166,356	8
195,897	975,908	290,833	255,630	971,888	90,690	156,808	434,779	
32,319	37,046	—	12,785	16,480	—	58,904	63,329	9
18	737	210	4	589	40	11	216	10
22,018	71,298	24,875	30,680	86,221	4,531	54,575	72,517	
160	732	583	104	1,581	47	92	273	11
62,378	220,922	191,073	41,373	487,978	18,814	38,502	103,118	
27,722	210,067	118,527	46,504	377,127	7,450	70,934	178,704	12
112,118	502,287	334,475	118,557	951,326	30,795	164,011	354,339	
2,352	176,166	215,558	771	244,223	141,497	260	153,212	13
1,049,993	1,486,079	54,871	2,378,524	2,493,694	15,632	2,245,754	2,352,235	14
47,323	364,409	105,552	34,546	199,587	33,619	28,632	115,221	15
1,099,368	2,026,654	375,981	2,413,841	2,937,504	190,748	2,274,646	2,620,668	
10,402	65,424	20,818	80,004	129,294	2,078	32,806	45,049	16
11	25	—	54	56	4	20	38	17
15,126	84,871	—	43,118	44,718	2,810	63,447	82,957	
589	164,948	12,723	6,531	46,595	—	2,662	7,396	18
104,900	50,248,567	4,840,000	1,637,000	17,175,123	—	1,318,000	3,114,200	
130,428	50,398,862	4,860,818	1,760,122	17,349,135	4,888	1,414,253	3,242,206	
864,784	864,784	1,735	56,562	60,247	456	37,349	38,375	19
5,000	47,195	150	380	24,658	435	1,661	16,914	0
869,784	911,979	1,885	60,942	84,905	891	39,010	55,289	
59,356	83,085	17,541	78,432	96,114	14,479	57,179	72,563	21
\$ 817	125,047	37,122	1,349	214,917	18,920	3,394	73,990	22
7,016 804	7,366,733	11,949	1,072	52,674	2,223	1,271	15,070	23
34,974	34,974	3,695	69,790	74,285	14,562	47,479	66,146	24
74,066	74,566	—	65,956	65,956	—	37,456	37,456	25
140,255	140,255	—	184,787	184,787	—	117,891	117,891	
6,587,817	7,631,498	907,729	7,574,512	8,822,207	580,931	5,346,795	6,408,583	26
240,175	1,256,921	50,336	143,817	499,730	69,316	132,985	317,509	27
16,582,481	71,722,908	6,924,933	12,730,854	32,389,669	1,035,792	9,943,325	14,030,001	
464,028,183	1,239,492,098	312,844,871	542,322,967	1,189,163,701	299,361,675	293,906,643	740,240,680	



12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>I. Vegetable products (except chemicals, fibres and wood).</b>					
Beverages, distilled and fermented—					
Brewed.					
1	Ale, porter, etc..... gal.	8,899	8,990	17,902	28,192
	\$	10,939	9,399	20,344	46,153
Distilled.					
2	Brandy, etc..... gal.	2,092	3,416	101,416	4,106
	\$	8,821	12,098	378,694	29,132
3	Cordials and liqueurs, all kinds..... gal.	2,863	1,465	8,870	1,694
	\$	10,530	7,444	30,419	10,161
4	Gin, all kinds, n.o.p..... gal.	11,721	41	18,827	63,734
	\$	50,907	256	59,574	301,742
5	Rum..... gal.	6,067	3,743	92,908	23,580
	\$	8,076	4,449	84,230	63,951
6	Vermouth..... gal.	4	2,405	4,188	606
	\$	6	4,256	7,446	4,552
7	Whiskey..... gal.	204,029	4,410	208,675	808,076
	\$	941,448	34,113	976,700	5,311,444
8	All spirituous or alcoholic liquors, n.o.p... gal.	17	5,497	6,584	2
	\$	50	4,974	7,098	9
<b>Total distilled beverages..... gal.</b>		<b>226,793</b>	<b>20,977</b>	<b>441,633</b>	<b>901,798</b>
\$		<b>1,019,838</b>	<b>67,590</b>	<b>1,544,246</b>	<b>5,720,991</b>
Fermented.					
<b>Wines.</b>					
9	Wines, non-sparkling..... gal.	4,823	123,005	218,134	10,893
	\$	9,121	102,292	215,845	35,780
10	Champagne, and all other sparkling wines in bottles..... doz.	42	145	2,978	188
	\$	295	1,373	25,995	7,413
<b>Total wines..... \$</b>		<b>9,416</b>	<b>103,665</b>	<b>241,840</b>	<b>43,193</b>
<b>Total distilled and fermented beverages..... \$</b>		<b>1,040,193</b>	<b>235,187</b>	<b>1,860,963</b>	<b>5,813,683</b>
Fruits, fresh—					
11	Apples..... brl.	—	281,316	281,316	—
	\$	—	1,372,644	1,372,644	—
12	Apricots, quinces, etc..... lb.	—	15,032,278 <sup>3</sup>	15,036,078 <sup>3</sup>	—
	\$	—	740,168	740,377	—
13	Bananas..... bunch	—	1,663,431	1,665,414	—
	\$	—	3,715,747	3,716,713	—
14	Cherries..... lb.	—	719,563	719,563	—
	\$	—	105,290	105,290	—
15	Cranberries..... brl.	—	21,832	21,382	—
	\$	—	171,124	171,124	—
16	Grape fruit or shaddocks..... \$	—	4,842,470 <sup>1</sup>	5,063,531 <sup>1</sup>	200
17	Grapes..... lb	—	6,490,486	6,490,486	326,276
	\$	—	622,406	622,406	70,762
18	Lemons and limes..... \$	894	1,084,518	1,128,075	6,371
19	Oranges <sup>2</sup> ..... \$	—	—	—	3,685
20	Peaches..... lb.	—	10,654,515	10,654,515	—
	\$	—	535,432	535,432	—
21	Pears <sup>4</sup> ..... lb.	—	—	—	—
	\$	—	—	—	—
22	Pineapples..... \$	—	277,556	277,592	—
23	Plums..... bush	—	111,244	111,244	—
	\$	—	425,543	425,543	—
24	Fruits, other fresh..... \$	113	835,330	840,485	11
<b>Total fruits, fresh..... \$</b>		<b>1,007</b>	<b>14,728,228</b>	<b>14,999,212</b>	<b>81,029</b>
Fruits, dried—					
25	Apricots..... lb.	—	—	—	—
	\$	—	—	—	—
26	Currants..... lb.	—	1,188,619	2,555,805 <sup>1</sup>	—
	\$	—	238,943	480,879	—

<sup>1</sup>Includes oranges in 1919.   <sup>2</sup>Included with grape fruit or shaddocks in 1919.

<sup>3</sup>Includes pears in 1919.

<sup>4</sup>Included with apricots, quinces, etc., in 1919.

12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
10,568	38,760	59,785	6,679	66,738	42,306	3,611	46,706	1
12,836	58,989	123,633	9,769	132,833	103,051	6,322	110,449	
3,904	149,157	9,012	1,965	355,557	1,669	21	113,386	2
14,133	986,494	96,491	20,815	3,379,275	31,832	275	1,715,929	
2,242	10,419	4,351	563	45,165	3,095	70	17,833	3
13,138	53,073	62,556	4,806	312,521	71,373	164	209,317	
2,470	183,113	197,667	360	816,105	82,449	84	190,942	4
9,204	699,473	2,026,542	4,025	4,174,925	1,549,972	621	2,350,116	
10,307	214,416	53,630	5,935	329,271	15,872	3,992	111,009	5
25,709	315,886	288,942	13,274	1,033,794	250,466	17,583	662,379	
5,761	19,877	3,989	493	43,640	1,471	23	19,694	6
19,908	70,094	19,928	2,882	134,738	8,103	113	60,229	
53,003	861,222	1,627,337	178,094	1,891,056	836,711	61,435	908,221	7
110,639	5,423,636	20,353,005	1,553,404	22,947,000	16,950,638	1,109,546	18,194,027	
2,467	6,397	1,031	28,158	80,787	153	2,616	9,666	8
2,638	17,185	9,505	74,894	253,358	3,206	4,670	37,078	
80,154	1,444,601	1,897,017	208,201	3,554,214	941,119	65,737	1,368,297	
195,369	7,565,844	22,856,969	1,663,196	32,224,707	18,865,590	1,129,611	23,224,714	
427,872	693,583	23,723	50,216	625,682	26,588	10,414	317,284	9
661,056	1,223,421	129,265	79,996	1,652,568	102,555	16,093	799,591	
2,190	13,395	2,898	90	30,390	958	347	21,023	10
24,489	267,101	94,970	1,207	625,195	32,554	4,690	385,087	
685,545	1,490,522	224,235	81,023	2,277,763	135,109	20,783	1,184,678	
927,388	9,152,339	23,211,493	1,764,558	34,653,630	19,106,342	1,161,992	24,527,729	
145,088	145,088	—	273,319	273,319	—	110,702	110,702	11
1,053,744	1,053,744	—	1,528,606	1,528,606	—	680,832	680,832	
1,430,034	1,430,034	20	630,399	630,419	—	1,078,530	1,078,530	12
114,378	114,378	12	57,038	57,050	—	76,438	76,438	
1,844,559	1,844,559	—	1,706,288	1,706,288	—	2,159,381	2,159,381	13
4,947,007	4,947,007	—	5,415,511	5,415,511	—	5,210,811	5,211,098	
1,138,351	1,138,351	—	477,265	477,265	—	857,304	863,604	14
212,508	212,508	—	108,737	108,737	—	166,580	167,525	
33,704	33,704	—	21,841	21,841	—	16,953	16,955	15
247,796	247,796	—	173,634	173,634	—	200,654	200,668	
622,406	665,496	—	741,167	791,726	—	656,302	711,993	16
8,624,620	8,979,296	600,414	5,979,961	6,632,035	608,080	6,917,481	7,069,621	
865,104	942,358	129,113	717,711	838,340	109,960	695,235	831,522	17
1,270,862	1,378,597	2,416	867,468	1,005,616	4,290	1,158,298	1,446,444	
6,225,150	6,534,269	4,777	6,159,339	6,322,543	8,414	6,335,104	6,594,107	18
14,219,162	14,219,162	120	6,195,284	6,195,404	540	10,927,509	10,928,049	
640,771	640,771	58	442,207	442,265	219	583,231	583,450	19
19,273,867	19,280,139	—	12,482,288	12,484,934	—	10,367,293	10,370,283	
1,065,301	1,065,702	—	797,381	797,645	—	584,399	584,599	20
334,996	338,052	—	328,914	329,006	—	451,715	453,018	
125,934	125,934	16	106,747	106,763	10	106,447	106,457	21
544,391	544,391	230	476,229	476,459	170	404,299	404,469	
933,424	946,561	—	638,113	640,631	1,722	524,073	532,831	22
19,077,838	19,631,631	136,605	18,452,055	18,947,769	125,030	17,737,097	18,488,635	
471,790	472,155	—	686,862	687,051	—	598,528	599,338	23
109,230	109,331	—	164,497	164,531	—	107,977	108,145	
792,810	6,414,102	132,246	975,707	4,934,917	219,697	983,008	7,195,245	24
162,740	1,053,399	23,279	152,332	849,893	29,670	126,100	1,117,955	

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>I. Vegetable products—con.</b>					
<b>Fruits, dried—concluded.</b>					
1	Dates..... lb.	—	1,620,160	1,628,878	531,244
	\$	—	361,116	362,340	71,131
2	Figs..... lb.	—	1,517,587	1,846,198	—
	\$	—	230,417	260,830	—
3	Peaches..... lb.	—	—	—	—
	\$	—	—	—	—
4	Prunes and plums, unpitted..... lb.	—	10,424,661	10,429,623	—
	\$	—	930,351	930,894	—
5	Raisins..... lb.	—	34,210,841	34,337,814	9,262
	\$	—	3,167,862	3,190,546	2,264
6	All other fruits..... lb.	20	4,548,835	4,698,597	—
	\$	2	554,790	576,222	—
	<b>Total dried fruits..... lb.</b>	<b>20</b>	<b>53,510,763</b>	<b>55,496,915</b>	<b>540,506</b>
	<b>\$</b>	<b>2</b>	<b>5,483,479</b>	<b>5,801,702</b>	<b>73,395</b>
7	Fruit juices..... gal.	6,522	141,294	197,182	11,962
	\$	14,272	176,579	207,707	18,605
<b>Fruits, otherwise prepared—</b>					
8	Citrons, lemons and orange rinds in brine \$	—	3,084	16,263	81,580
9	Fruit in air-tight-cans, etc..... lb.	14,400	9,187,909	9,735,741	109,281
	\$	1,457	971,513	1,025,212	12,232
10	Jellies, jams and preserves, n.o.p..... lb.	1,619	94,705	169,285	1,151,193
	\$	122	24,924	34,494	194,151
11	Olives in brine and otherwise..... gal.	—	67,886	148,830	160
	\$	—	51,578	89,648	25
	<b>Total fruits, otherwise prepared \$</b>	<b>1,579</b>	<b>1,160,063</b>	<b>1,165,879</b>	<b>287,994</b>
	<b>Grand total fruits..... \$</b>	<b>16,860</b>	<b>21,440,227</b>	<b>22,174,368</b>	<b>461,020</b>
<b>Grains, flours and kindred products—</b>					
12	Beans, n.o.p..... bush.	20	78,143	265,079	3,594
	\$	221	470,576	1,369,999	23,855
13	Corn (Indian) for purpose of distillation..... bush.	—	210,756	210,756	—
	\$	—	249,198	249,198	—
14	Corn (Indian) not for purpose of distillation..... bush.	1	10,504,781	10,527,998	—
	\$	12	15,811,484	15,837,229	—
15	Oats..... bush.	—	4,276,914	4,276,915	1,679
	\$	—	3,359,754	3,359,754	3,309
16	Peas..... bush.	2	17,528	32,849	24
	\$	36	102,404	156,152	264
17	Rice, uncleaned, unhulled or paddy..... lb.	—	828,170	32,482,144	—
	\$	—	56,208	1,385,038	—
18	Rice, cleaned..... lb.	2,072	1,997,520	21,057,986	6,710
	\$	131	160,129	1,008,751	378
19	Wheat..... bush.	—	45,820	303,440	2
	\$	—	109,172	516,542	6
	<b>Total grains..... \$</b>	<b>400</b>	<b>20,357,114</b>	<b>23,920,852</b>	<b>30,099</b>
<b>Flour and milled products—</b>					
20	Cornmeal..... brl.	—	91,020	91,022	—
	\$	—	803,220	803,241	—
21	Rice and sago flour, rice meal, etc..... lb.	—	424,666	1,243,197	—
	\$	—	53,091	85,800	—
22	Sago and tapioca flour..... lb.	—	765,485	1,115,552	—
	\$	—	63,407	78,217	—
23	Wheat flour..... brl.	—	5,433	5,564	—
	\$	—	64,287	66,177	—
<b>Other milled products—</b>					
24	Malt, whole, crushed or ground..... lb.	—	578,146	578,146	—
	\$	—	24,614	24,614	—
25	Sago and tapioca..... lb.	67,268	21,894	4,494,431	114,369
	\$	4,027	2,580	206,179	7,249
26	Other breadstuffs..... \$	584	389,162	401,270	8,111
	<b>Total flour and milled products.. \$</b>	<b>17,984</b>	<b>2,026,997</b>	<b>2,305,629</b>	<b>43,877</b>

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
3,282,096	3,850,936	284,370	3,742,638	4,097,068	1,086,558	5,275,925	6,461,995	1
677,222	754,994	35,174	556,722	603,346	84,276	670,068	766,042	2
3,199,104	4,502,926	46,456	1,896,701	2,670,145	158,657	2,367,336	3,637,348	3
520,794	735,709	3,612	238,743	337,432	13,461	286,042	454,461	4
3,149,592	3,149,592	—	1,154,843	1,154,843	—	1,459,687	1,459,687	5
551,719	551,719	—	210,351	210,351	—	176,929	176,929	6
14,482,369	14,491,800	—	10,489,100	10,494,520	—	13,702,978	13,705,795	7
2,033,006	2,035,526	—	1,458,027	1,459,102	—	1,277,912	1,278,539	8
38,864,941	37,619,365	83,838	20,390,188	24,979,194	99,109	24,177,923	27,666,692	9
5,242,073	5,420,276	19,016	4,363,940	5,482,589	16,126	4,242,809	5,132,755	10
1,512,754	1,791,473	—	1,532,710	1,734,400	—	918,952	1,507,757	11
254,105	295,827	—	117,878	162,997	—	73,557	159,987	12
<b>63,755,456</b>	<b>72,292,349</b>	<b>546,910</b>	<b>40,868,749</b>	<b>50,752,138</b>	<b>1,564,021</b>	<b>49,484,337</b>	<b>61,959,357</b>	
<b>9,550,889</b>	<b>10,956,781</b>	<b>81,081</b>	<b>7,262,490</b>	<b>9,270,241</b>	<b>143,533</b>	<b>6,961,394</b>	<b>9,151,256</b>	
114,524	205,419	23,764	30,785	106,445	15,651	26,857	75,312	7
206,731	255,294	50,699	109,591	178,331	15,085	130,475	166,877	8
50,631	134,407	53,093	10,194	72,522	14,836	4,495	24,136	9
11,434,555	12,799,483	88,976	13,390,570	19,383,538	64,118	6,261,354	8,096,222	10
1,560,261	1,697,324	10,959	1,950,243	2,795,868	8,160	765,172	970,308	11
280,354	1,499,985	860,011	242,459	1,434,109	570,751	88,175	774,548	12
65,161	271,743	224,160	75,846	397,745	107,718	35,731	173,271	13
84,952	134,396	—	49,606	138,854	—	73,243	181,858	14
85,428	124,253	—	70,839	193,166	—	67,550	145,029	15
<b>1,761,955</b>	<b>2,228,207</b>	<b>288,212</b>	<b>2,107,122</b>	<b>3,459,301</b>	<b>130,714</b>	<b>872,948</b>	<b>1,312,744</b>	
<b>30,597,176</b>	<b>33,071,673</b>	<b>556,598</b>	<b>27,931,258</b>	<b>31,855,642</b>	<b>414,362</b>	<b>25,701,914</b>	<b>29,119,512</b>	
249,753	444,698	4,075	151,518	203,725	5,002	60,726	148,157	16
947,674	1,594,030	21,165	497,458	637,632	20,614	197,876	376,792	17
302,583	202,583	—	318,804	318,804	—	365,417	365,417	18
318,202	318,202	—	344,467	344,467	—	230,941	230,941	19
8,668,200	8,766,708	10	9,520,482	9,658,960	26	13,755,545	13,755,571	20
13,897,585	14,052,977	23	12,084,398	12,276,943	68	8,482,336	8,482,404	21
3,127,681	3,129,360	—	939,734	939,955	1,266	118,065	119,334	22
2,448,672	2,451,981	—	660,433	661,030	1,835	70,157	71,993	23
69,433	72,188	22	62,450	67,339	3	26,302	33,810	24
317,773	328,192	266	234,848	248,200	14	86,286	106,334	25
12,755,447	43,935,264	—	7,779,558	34,990,378	—	11,932,192	37,232,644	26
1,110,848	3,273,335	—	644,692	2,640,824	—	436,506	1,393,035	27
16,425,212	25,642,291	41,100	10,879,583	15,598,940	203,740	13,899,306	21,254,638	28
1,636,046	2,120,956	2,510	800,650	1,140,264	10,049	660,141	978,164	29
92,082	92,087	—	134,109	134,113	—	371,651	371,656	30
189,130	189,142	—	280,250	280,266	—	522,029	522,071	31
<b>20,924,948</b>	<b>24,391,806</b>	<b>23,964</b>	<b>15,592,912</b>	<b>18,275,650</b>	<b>33,275</b>	<b>10,711,113</b>	<b>12,187,459</b>	
26,317	26,354	—	28,627	28,630	—	35,960	35,960	32
216,298	216,594	—	207,610	207,610	—	130,263	130,263	33
579,091	701,787	2,220	328,903	416,284	10,048	93,927	175,749	34
62,078	72,922	349	32,917	41,680	1,127	8,535	16,010	35
495,138	725,082	38,970	1,301,088	2,137,141	157,218	966,281	1,642,167	36
36,838	43,155	2,071	76,711	125,610	6,238	28,854	47,847	37
15,707	15,801	1	27,554	27,583	10	39,751	39,900	38
166,080	167,250	12	269,366	269,867	127	271,407	273,159	39
2,950,730	2,950,730	1,980	7,229,715	7,231,695	2,640	9,081,419	9,084,059	40
128,715	128,715	226	319,088	319,314	224	261,413	261,637	41
242,342	4,553,578	55,327	441,998	2,704,340	108,012	226,235	3,882,799	42
21,744	301,155	5,360	17,658	139,015	3,104	10,669	128,985	43
250,351	280,581	4,358	280,580	308,292	8,697	147,063	172,231	44
<b>979,301</b>	<b>1,337,860</b>	<b>41,676</b>	<b>1,381,404</b>	<b>1,620,246</b>	<b>55,396</b>	<b>1,037,704</b>	<b>1,245,748</b>	



**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
I. Vegetable products—con.					
	Prepared foods and bakery products—				
1	Biscuits, sweetened..... lb.	876	22,919	35,823	214,041
	\$	271	5,168	6,927	75,053
2	Biscuits, not sweetened..... lb.	414	421,568	443,935	66,382
	\$	46	43,899	47,172	16,107
3	Bread, passover..... \$	—	121,709	121,709	—
4	Cereal foods, prepared, in packages not exceeding 25 lb..... lb.	33,329	1,912,471	1,956,461	47,906
	\$	6,543	181,246	188,757	11,396
5	Cereal foods prepared, n.o.p..... \$	17	56,988	57,610	1,974
6	Macaroni and vermicelli..... lb.	—	49,843	115,272	—
	\$	—	5,516	12,764	—
Total prepared foods and bakery products..... \$		6,877	414,622	434,939	104,530
Other kindred products—					
7	Arrowroot..... lb.	341	21,593	360,603	35,349
	\$	95	3,458	55,720	4,647
8	Milk food and other similar preparations. \$	27,642	360,845	389,883	29,088
Total grain, flours and kindred products..... \$		52,998	23,163,036	27,107,023	212,241
Gums and resins—					
9	Arabia, amber, etc..... lb.	—	—	—	35,322
	\$	32,482	814,336	1,144,257	13,144
10	Australian, copal, damar, etc..... lb.	—	—	—	110,729
	\$	—	—	—	19,545
11	Chicle or sappato gum, crude..... lb.	—	473,511	1,967,521	—
	\$	—	304,574	1,141,543	—
12	Lac, crude, seed, button, stick and shell. lb.	—	—	—	18,593
	\$	—	—	—	24,770
13	Resin or rosin in packages..... cwt.	—	337,099	337,099	—
	\$	—	1,216,508	1,216,508	—
Total gums and resins..... \$		32,587	2,347,822	3,514,817	57,469
14	Nuts, all kinds..... \$	30,251	2,258,535	3,475,002	220,973
Oils, vegetable, and by-products—					
15	Oil cake and meal..... cwt.	—	491,842	495,855	—
	\$	—	1,304,191	1,313,088	—
16	Castor oil..... gal.	3,501	30,198	56,079	111,610
	\$	5,861	83,686	135,006	206,335
17	Chinawood and rosin oil..... \$	—	719,667	806,496	—
18	Cocanut, palm and palm kernel oil..... gal.	11,511	515,400	2,390,107	17,977
	\$	14,756	631,054	3,089,637	34,762
19	Cocanut oil, n.o.p..... gal.	—	13,918	28,950	—
	\$	—	25,727	45,123	—
20	Cotton seed oil, crude..... gal.	—	4,596,851	4,596,851	—
	\$	—	7,403,369	7,403,369	—
21	Cotton seed oil, n.o.p..... gal.	—	169,200	169,650	215
	\$	—	286,879	287,419	643
22	Essential oils, n.o.p..... lb.	22,395	313,880	398,104	32,321
	\$	75,853	519,008	676,281	90,266
23	Flaxseed or linseed oil raw or boiled..... lb.	—	60,383	70,299	4,532,607
	\$	—	11,199	12,657	1,038,697
24	Olive oil..... gal.	79	10,688	20,429	3,574
	\$	239	33,363	64,428	26,912
Total oils, vegetable..... \$		97,433	10,090,875	13,000,837	1,413,204
Total oils, vegetable, and by-products..... \$		97,433	11,395,066	14,313,925	1,413,204

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
121,745	352,136	201,817	54,141	276,792	125,369	43,937	192,629	1
28,533	106,318	87,727	14,277	107,758	47,720	11,540	66,108	2
582,867	725,867	199,133	421,420	780,532	309,151	260,061	597,109	3
65,805	91,983	26,929	54,945	99,418	31,377	39,496	76,309	4
156,265	156,265	—	103,772	103,772	—	138,302	138,302	5
2,016,538	2,079,552	34,491	629,025	670,047	54,667	867,464	932,694	6
220,211	233,903	8,740	70,618	80,669	11,477	89,235	102,566	7
57,846	60,788	4,973	32,120	37,713	1,472	26,434	28,645	8
886,432	949,960	200	850,778	911,004	—	886,129	1,096,752	9
108,461	115,895	24	111,550	119,676	—	93,826	114,810	10
<b>636,941</b>	<b>765,162</b>	<b>128,393</b>	<b>387,282</b>	<b>549,006</b>	<b>92,046</b>	<b>398,833</b>	<b>526,746</b>	
10,976	202,032	4,830	13,582	141,789	4,588	39,614	184,993	11
1,780	25,140	784	1,207	13,226	757	4,000	13,552	12
380,966	411,295	73,883	480,908	556,673	45,152	355,062	402,356	13
<b>22,923,936</b>	<b>26,931,253</b>	<b>268,700</b>	<b>17,843,713</b>	<b>21,014,801</b>	<b>226,626</b>	<b>12,506,712</b>	<b>14,375,855</b>	
366,900	467,982	270,594	185,308	506,749	91,411	289,435	459,229	14
125,438	151,856	52,303	80,466	146,086	14,644	62,922	87,265	15
1,735,809	1,855,840	76,197	1,848,760	2,149,778	28,962	999,317	1,127,143	16
335,352	357,699	25,223	392,798	452,557	6,293	158,856	185,029	17
891,117	2,084,392	—	293,243	514,910	—	343,713	492,086	18
614,588	1,542,165	—	131,676	265,902	—	171,511	238,483	19
652,568	1,339,984	77,529	836,488	1,032,175	1,792	1,073,431	1,224,632	20
653,827	1,194,501	70,498	790,069	958,671	466	662,948	769,243	21
238,169	238,169	336	267,879	268,333	1	237,304	241,651	22
1,459,395	1,459,395	2,201	1,461,322	1,464,778	6	479,480	493,048	23
<b>3,199,182</b>	<b>4,716,231</b>	<b>150,235</b>	<b>2,884,338</b>	<b>3,316,011</b>	<b>21,758</b>	<b>1,553,478</b>	<b>1,791,433</b>	
3,142,417	5,889,573	343,546	2,129,665	4,889,294	136,288	1,893,434	4,534,284	24
97,106	98,106	1,578	186,236	187,862	500	104,609	106,113	25
333,671	336,310	10,757	490,278	501,165	1,650	225,369	229,095	26
31,082	143,717	95,875	10,645	106,691	91,651	11,471	103,380	27
70,355	279,231	201,694	23,601	225,623	80,878	15,068	96,438	28
680,402	697,295	1,958	678,265	734,468	10,948	301,357	312,305	29
807,006	861,462	142,866	904,517	1,103,672	45,772	1,285,171	1,342,390	30
1,175,280	1,255,664	221,923	1,157,454	1,477,090	41,996	954,222	1,008,897	31
121,893	121,919	34,271	92,255	126,526	9,362	54,017	63,585	32
266,987	267,020	85,709	181,158	266,867	14,190	78,572	93,040	33
5,789,859	5,789,859	—	4,173,007	4,173,007	—	4,886,834	4,886,834	34
9,518,484	9,518,484	—	3,944,645	3,944,645	—	3,283,915	3,283,915	35
191,361	161,691	797	167,241	168,038	388	69,639	70,040	36
372,388	373,232	1,675	221,868	223,543	849	56,623	57,487	37
311,868	388,395	45,806	212,447	285,400	30,723	274,868	346,047	38
739,891	971,598	162,269	552,349	874,628	70,042	395,128	556,703	39
288,651	4,836,108	5,375,276	492,521	9,955,926	239,887	103,372	416,231	40
63,686	1,106,531	1,310,413	97,400	1,425,452	16,779	10,241	34,543	41
106,734	202,302	2,693	69,601	136,764	4,284	91,305	190,242	42
324,678	633,903	13,786	227,831	518,254	13,905	226,982	498,412	43
<b>13,959,003</b>	<b>15,973,417</b>	<b>2,043,493</b>	<b>7,593,638</b>	<b>10,328,589</b>	<b>270,173</b>	<b>5,622,249</b>	<b>6,317,924</b>	
<b>14,292,674</b>	<b>16,309,727</b>	<b>2,054,250</b>	<b>8,083,916</b>	<b>10,829,754</b>	<b>271,823</b>	<b>5,847,618</b>	<b>6,547,019</b>	

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>I. Vegetable products—con.</b>					
1	Plants, trees, shrubs and vines..... \$	13,549	369,285	468,863	20,872
2	Rubber and its products— Rubber and gutta-percha, crude caoutchouc..... lb.	548,488	4,819,213	19,227,232	6,764,275
	\$	208,454	2,314,508	7,794,260	3,626,381
3	Tires for vehicles, all kinds..... \$	17,121	1,024,171	1,045,140	22,973
4	Manufactures of India-rubber, n.o.p..... \$	166,484	1,093,046	1,287,601	326,024
<b>Total rubber and its products..... \$</b>		<b>630,315</b>	<b>6,380,323</b>	<b>12,315,711</b>	<b>4,282,954</b>
5	Seeds— Clover seed..... lb.	—	—	—	128,252
	\$	—	348,685	348,685	84,669
6	Flax seed..... bush.	—	16,187	17,660	980
	\$	—	116,118	121,213	13,165
7	Garden, field and other seeds..... \$	32,442	546,666	632,082	100,672
8	Timothy seed..... lb.	—	—	—	—
	\$	—	543,630	543,630	—
<b>Total seeds..... \$</b>		<b>137,088</b>	<b>1,782,359</b>	<b>1,987,995</b>	<b>335,829</b>
9	Starch and its products..... \$	2,721	339,775	347,944	9,389
10	Sugar and its products— Candy and confectionery..... lb.	13,648	1,262,224	1,907,121	561,535
	\$	3,195	246,210	332,952	184,608
11	Molasses and syrups, n.o.p..... \$	—	575,535	3,849,981	70,816
12	Sugar, cane and beet..... lb.	775	38,099,183	718,982,416	6,016
	\$	65	11,978,138	35,385,037	578
<b>Total sugar and its products..... \$</b>		<b>3,260</b>	<b>12,800,784</b>	<b>39,568,991</b>	<b>256,002</b>
13	Cocoa and its products— Cocoa beans, not roasted, crushed or ground..... cwt.	—	51,290	167,551	15,560
	\$	—	717,571	2,178,714	343,485
14	Cocoa paste, cocoa or chocolate preparations, etc..... lb.	957	1,761,817	1,766,298	62,452
	\$	454	361,351	362,527	30,151
15	Cocoa butter..... lb.	4,480	4,028,303	4,032,783	1,555,832
	\$	963	1,241,222	1,242,185	668,923
<b>Total cocoa and its products..... \$</b>		<b>1,417</b>	<b>2,320,144</b>	<b>3,783,426</b>	<b>1,042,559</b>
16	Coffee, green, imported direct..... lb.	27,462	—	14,509,843	1,277,738
	\$	3,073	—	1,585,992	417,173
17	Total coffee and chicory..... lb.	29,406	765,929	15,363,098	1,289,168
	\$	3,439	269,745	1,865,612	422,072
18	Spices..... \$	118,465	327,548	818,620	395,467
19	Tea..... lb.	28,076	112,019	17,174,279	2,901,458
	\$	7,167	29,394	3,793,724	1,122,828
20	Tobacco— Tobacco, unmanufactured..... lb.	—	24,329,409	25,103,080	26,128
	\$	—	10,325,820	10,910,010	34,873
21	Tobacco, manufactured— Cigars..... lb.	19	3,955	29,770	21
	\$	102	23,681	159,069	171
22	Cigarettes..... lb.	17,197	963	21,085	14,732
	\$	61,995	3,060	73,137	66,517
23	Tobacco, cut..... lb.	107,634	365,132	499,451	118,512
	\$	259,422	319,703	589,905	287,339
<b>Total tobacco..... lb.</b>		<b>154,414</b>	<b>24,742,742</b>	<b>25,726,472</b>	<b>221,059</b>
	\$	<b>381,561</b>	<b>10,695,273</b>	<b>11,815,350</b>	<b>506,690</b>

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
477,368	709,507	32,721	450,380	993,045	23,621	343,845	934,242	1
6,383,440	24,433,498	4,734,734	7,544,661	22,806,201	820,963	13,278,344	18,952,465	2
2,904,973	12,010,732	2,483,804	1,977,845	8,887,196	133,461	2,268,279	3,437,716	3
1,987,259	2,014,882	31,007	2,193,992	2,310,941	16,254	1,157,261	1,188,981	4
1,032,144	1,404,909	515,069	1,103,777	1,688,865	390,923	785,592	1,202,623	
<b>8,244,814</b>	<b>18,059,435</b>	<b>3,568,581</b>	<b>7,255,178</b>	<b>15,480,960</b>	<b>828,055</b>	<b>5,233,577</b>	<b>7,142,258</b>	
2,534,024	2,662,276	70	2,596,382	2,598,380	481,640	3,063,040	3,547,080	5
1,217,628	1,302,297	29	559,276	560,247	100,620	613,458	715,209	
49,890	107,522	397	315,352	536,679	140	1,696	284,476	6
250,221	431,455	4,475	1,221,155	2,048,154	876	8,237	445,605	
560,315	721,549	62,703	601,055	721,463	55,950	476,896	592,773	7
11,480,762	11,498,560	—	9,281,201	9,281,201	1,090	12,851,393	12,852,483	8
1,486,594	1,488,800	—	814,023	814,023	547	925,803	926,350	
<b>3,611,478</b>	<b>4,210,782</b>	<b>242,854</b>	<b>3,440,007</b>	<b>4,732,501</b>	<b>265,019</b>	<b>2,077,032</b>	<b>2,936,335</b>	
340,550	353,865	14,053	513,191	553,562	16,541	233,326	270,685	9
1,892,504	2,897,011	878,860	1,283,907	2,483,597	1,497,753	1,080,747	3,131,802	10
475,644	740,765	325,963	396,796	802,230	409,161	197,281	725,523	
661,806	4,418,295	96,696	609,923	6,988,383	52,146	403,209	1,687,592	11
340,622,136	1,082,730,684	5,048,448	167,844,267	706,825,703	3,120	166,444,888	883,283,112	12
22,546,404	68,457,361	972,724	20,471,695	78,276,361	283	9,058,292	41,624,686	
<b>23,684,991</b>	<b>73,618,354</b>	<b>1,395,383</b>	<b>21,479,853</b>	<b>86,070,230</b>	<b>461,590</b>	<b>9,660,328</b>	<b>44,440,911</b>	
93,790	166,494	9,778	61,117	116,269	29,301	71,541	163,973	13
2,037,771	3,553,230	150,832	858,586	1,717,316	286,839	687,282	1,557,382	
1,437,511	1,535,177	1,121,305	705,908	1,863,549	443,134	640,118	1,149,967	
411,940	458,184	412,120	126,510	554,031	96,064	91,992	205,301	
7,060,954	8,630,460	427,161	2,688,156	3,257,725	869,111	3,688,213	5,124,467	15
2,941,310	3,615,331	171,633	876,043	1,105,314	268,304	999,839	1,430,214	
<b>5,391,021</b>	<b>7,626,745</b>	<b>734,585</b>	<b>1,861,139</b>	<b>3,376,661</b>	<b>651,207</b>	<b>1,779,113</b>	<b>3,192,897</b>	
—	19,028,181	1,358,714	—	16,293,945	971,438	—	20,049,318	16
—	4,449,756	433,612	—	3,814,097	185,848	—	3,020,763	
1,577,774	20,759,379	1,429,931	1,120,465	17,791,375	996,423	1,612,420	21,745,555	17
590,005	5,077,103	461,663	390,718	4,284,500	197,337	452,659	3,491,811	
444,448	1,130,902	598,832	318,167	1,158,067	519,470	267,536	1,053,526	18
1,227,656	32,339,350	12,058,587	326,589	33,422,902	12,390,354	275,189	38,844,703	19
309,683	8,336,163	3,886,382	85,684	9,668,785	3,632,605	55,727	9,132,093	
23,398,746	24,345,295	47,401	19,032,367	20,007,411	17,762	19,848,439	20,870,509	20
12,878,163	13,604,757	38,543	12,108,281	13,083,293	7,640	8,108,639	8,867,469	
1,771	26,698	149	1,150	28,666	167	1,003	15,081	21
10,905	175,130	1,443	7,693	205,322	1,315	7,901	125,266	
3,575	19,923	13,541	10,801	25,611	20,247	5,394	27,136	22
10,879	84,364	72,139	27,582	105,309	80,395	17,432	110,261	
350,437	504,720	160,913	279,865	474,000	154,656	182,864	359,721	23
372,018	674,893	489,514	346,224	852,746	445,443	243,822	699,262	
<b>23,775,958</b>	<b>25,982,143</b>	<b>266,098</b>	<b>19,348,484</b>	<b>20,604,167</b>	<b>254,069</b>	<b>20,064,323</b>	<b>21,360,669</b>	
<b>13,195,990</b>	<b>14,673,550</b>	<b>690,890</b>	<b>12,510,056</b>	<b>14,356,294</b>	<b>664,187</b>	<b>8,399,873</b>	<b>9,947,903</b>	



12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>I. Vegetable products—concluded.</b>					
1	Vegetables, fresh..... \$	56	3,094,114	3,190,442	100,270
2	Vegetables, canned..... lb. \$	87,632	5,147,240	5,617,981	60
		7,371	505,606	580,881	20
3	Sauces and pickles..... gal. \$	47,671	121,708	287,435	79,842
		103,328	154,459	328,855	201,657
	Miscellaneous vegetable products—				
4	Alcohol, industrial..... gal. \$	—	11,859	11,859	—
		—	11,589	11,589	—
5	Hops..... lb. \$	7,137	997,848	1,004,985	31,658
		4,117	233,631	237,748	28,720
6	Turpentine, spirits of..... gal. \$	—	920,363	920,363	21
		—	565,174	565,174	56
7	Yeast..... lb. \$	—	3,808,540	3,808,590	—
		—	977,556	977,569	—
	<b>Total vegetable products (except chemicals, fibres and wood).... \$</b>	<b>2,823,002</b>	<b>103,925,162</b>	<b>157,506,654</b>	<b>17,004,533</b>
<b>II. Animals and their products (except chemicals and fibres).</b>					
8	Animals, living..... \$	176,107	1,467,853	1,647,192	196,178
9	Bone, ivory and shell products..... \$	100,517	227,211	339,385	156,551
10	Feathers and quills..... \$	19,115	295,064	355,287	67,185
	Fishery products—				
11	Cod, haddock and pollock, fresh..... lb. \$	—	720,701	1,282,312	—
		—	38,112	64,343	—
12	Halibut, fresh..... lb. \$	—	228,132	615,678	—
		—	32,263	73,826	—
13	Oysters, shelled, in bulk..... gal. \$	—	115,577	115,577	—
		—	244,855	244,855	—
14	Salmon, fresh..... lb. \$	—	197,075	968,557	—
		—	19,232	57,573	—
15	Sardines and anchovies..... box \$	1,400	581,521	648,683	212,391
		143	61,736	70,397	33,961
16	Cod, haddock, pollock, dried..... lb. \$	—	30,588	5,716,283	—
		—	3,903	477,638	—
17	Herrings, pickled or salted..... lb. \$	175,720	233,138	12,453,819	620,557
		11,932	22,411	688,864	46,435
	<b>Total fishery products..... \$</b>	<b>14,791</b>	<b>873,346</b>	<b>2,592,403</b>	<b>136,999</b>
	Furs, hides, leather and their products—				
18	Fur skins, all kinds, not dressed..... \$	47,410	3,092,647	3,378,179	318,383
19	Fur skins, wholly or partly dressed..... \$	13,172	397,610	635,430	104,769
20	Hatters' furs, not on the skin..... \$	41,943	465,894	507,837	49,923
	<b>Total furs and skins..... \$</b>	<b>190,399</b>	<b>4,267,499</b>	<b>5,030,874</b>	<b>697,910</b>
21	Total hides and skins..... \$	51,463	2,193,026	5,427,544	659,217
	Leather and manufactures of—				
22	Belting leather..... \$	401	13,907	14,308	127,761
23	Calf, kid or goat, lamb and sheep skins, dressed, waxed, or glazed..... \$	21,920	3,523,043	3,544,963	91,061
24	Glove leathers, tanned or dressed..... \$	—	2,871,618	2,871,618	18,122
25	Upper leather, including dongola, etc..... \$	51,242	434,237	435,518	321,887
26	Boots and shoes, slippers and insoles..... \$	78,994	2,609,321	2,694,106	94,009
	<b>Total leather and manufactures of..... \$</b>	<b>238,405</b>	<b>11,221,211</b>	<b>11,468,787</b>	<b>1,125,507</b>
27	Hair and bristles..... \$	36,797	335,854	452,613	132,220
	Meat—				
28	Beef, fresh, chilled or frozen..... lb. \$	—	1,615,740	1,615,853	—
		—	290,066	299,084	—
29	Mutton and lamb, fresh, chilled or frozen..... lb. \$	—	1,096,612	5,928,089	—
		—	383,477	913,870	—

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
3,960,602	4,292,272	111,415	4,563,463	4,890,550	142,644	3,547,191	3,916,586	1
14,012,753	14,600,253	6,918	6,356,482	8,293,193	4,375	3,747,153	6,407,327	2
1,144,488	1,301,237	1,616	632,159	1,124,041	958	371,480	889,913	
148,697	341,952	98,921	83,111	299,827	114,087	59,911	299,311	3
205,384	495,377	264,584	128,936	500,148	252,389	98,706	460,447	
307,598	320,388	10	996,453	1,342,794	20	95,712	165,382	4
215,878	229,242	48	1,447,364	1,650,254	109	553,909	641,915	
1,752,331	1,850,742	57,436	1,498,185	1,681,822	45,951	2,055,543	2,141,702	5
984,369	1,065,224	48,289	843,507	1,000,711	39,940	688,153	778,958	
1,025,723	1,025,744	5	791,323	791,331	4	977,867	977,871	6
1,372,708	1,372,764	48	1,131,170	1,131,224	12	757,941	757,953	
3,247,391	3,247,776	—	1,577,500	1,577,564	—	1,764,055	1,764,108	7
878,242	878,342	—	465,421	465,453	—	578,487	578,540	
<b>142,510,266</b>	<b>242,075,389</b>	<b>38,724,130</b>	<b>121,052,297</b>	<b>261,081,334</b>	<b>27,949,006</b>	<b>85,336,700</b>	<b>173,274,288</b>	
2,372,530	2,570,377	397,720	2,672,951	3,071,991	113,124	2,375,813	2,504,015	8
478,425	675,572	267,021	601,718	1,012,695	62,693	188,206	305,963	9
435,222	585,094	91,920	340,317	533,552	45,524	219,190	307,511	10
2,658,136	2,836,678	—	897,263	1,111,052	—	535,784	721,763	11
100,405	108,914	—	36,007	45,222	—	20,989	28,660	
1,094,387	2,045,270	—	498,550	2,617,947	—	465,735	2,550,797	12
119,356	205,789	—	60,315	247,764	—	48,712	195,416	
174,414	174,414	—	143,576	143,576	—	132,106	132,106	13
406,051	406,051	—	356,038	356,038	—	298,653	298,653	
200,913	900,521	—	738,861	1,572,832	—	845,080	2,074,790	14
25,870	76,960	—	91,989	165,717	—	46,843	165,106	
226,266	3,461,948	376,608	400,261	3,945,698	289,654	334,637	4,492,554	15
41,441	526,194	54,005	39,977	709,164	35,513	38,973	471,448	
153,029	3,068,584	112	18,728	9,186,954	—	37,944	8,111,818	16
9,255	328,492	4	2,730	874,001	—	5,583	470,713	
339,662	11,289,472	1,011,438	310,650	9,934,208	1,205,909	252,144	10,024,124	17
20,842	555,520	83,426	25,126	427,935	76,499	18,753	330,774	
<b>1,687,581</b>	<b>3,678,019</b>	<b>201,329</b>	<b>1,147,557</b>	<b>3,947,608</b>	<b>156,689</b>	<b>1,210,477</b>	<b>3,071,034</b>	
9,419,845	10,295,065	319,378	3,606,108	4,624,227	63,597	6,218,494	6,498,585	18
686,554	1,329,607	82,775	457,046	1,123,599	36,869	538,035	1,240,645	19
542,378	592,301	49,817	513,205	603,810	32,792	153,188	245,909	20
<b>10,989,174</b>	<b>12,877,520</b>	<b>509,919</b>	<b>4,689,101</b>	<b>6,586,525</b>	<b>169,295</b>	<b>7,025,455</b>	<b>8,154,517</b>	
12,627,989	22,654,661	492,734	4,436,390	10,652,787	75,402	3,405,013	5,898,087	21
123,233	251,044	395,595	73,736	469,331	150,048	35,588	185,636	22
5,848,659	5,956,753	152,188	1,643,495	1,799,308	58,406	1,648,433	1,731,605	23
2,067,797	2,099,797	94,845	1,855,409	2,068,913	10,817	686,378	711,872	24
1,489,515	1,811,402	356,494	508,271	868,298	155,170	429,408	603,138	25
2,611,964	2,711,622	358,451	1,803,442	2,175,209	335,761	977,788	1,327,561	26
<b>15,742,091</b>	<b>17,102,802</b>	<b>2,075,621</b>	<b>7,842,171</b>	<b>10,545,004</b>	<b>1,139,069</b>	<b>5,318,608</b>	<b>6,875,582</b>	
473,420	740,904	111,256	601,676	959,921	65,971	339,841	532,228	27
1,811,609	1,811,609	—	1,541,431	1,632,862	—	72,808	73,512	28
230,240	230,240	—	290,125	299,542	—	20,051	20,085	
2,365,105	4,842,904	—	2,910,737	7,847,701	—	2,630,357	3,416,332	29
490,182	803,774	—	562,806	1,272,165	—	420,794	533,005	

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
II. Animals and their products—concluded.					
Meats—concluded.					
1	Pork, fresh, chilled or frozen..... lb.	-	3,495,320	3,516,020	-
	\$	-	809,574	813,266	-
2	Bacon and hams, shoulders and sides, cured..... lb.	-	1,192,377	1,195,818	20
	\$	-	270,367	271,556	12
3	Canned meats, poultry and game..... lb.	-	453,728	531,403	240,819
	\$	-	98,616	113,495	91,824
4	Pork, dry salted and in brine..... lb.	-	11,180,719	11,187,399	-
	\$	-	2,432,286	2,434,115	-
5	Soups and extracts..... \$	18,513	542,544	682,855	23,252
	<b>Total meats..... \$</b>	<b>18,563</b>	<b>5,154,384</b>	<b>5,905,271</b>	<b>214,555</b>
Milk products—					
6	Butter..... lb.	-	203,372	1,939,062	-
	\$	-	62,462	715,671	-
7	Casein..... lb.	-	-	-	48,160
	\$	-	33,319	33,319	7,646
8	Cheese..... lb.	-	164,305	172,943	2,014
	\$	-	61,301	64,867	1,014
	<b>Total milk and milk products..... \$</b>	<b>-</b>	<b>184,314</b>	<b>841,089</b>	<b>8,853</b>
Oils, fats, greases and waxes—					
9	Animal oils..... gal.	-	249,563	268,013	-
	\$	-	415,875	416,099	-
10	Fish, whale and seal oils..... gal.	4	28,686	368,454	53
	\$	27	37,137	541,951	126
11	Lard..... lb.	-	604,461	644,969	-
	\$	-	144,850	152,381	-
12	Lard compound, etc..... lb.	-	2,115,997	2,115,997	55,103
	\$	-	401,986	401,986	14,635
13	Grease, rough..... lb.	2,004	3,048,930	17,253,689	173,185
	\$	401	495,129	1,875,751	18,996
14	Grease and degrass..... lb.	46,247	1,724,861	1,945,850	91,097
	\$	6,363	224,617	255,034	10,640
15	Oleomargarine..... lb.	-	4,217,916	4,217,916	-
	\$	-	1,180,656	1,180,656	-
	<b>Total oils, fats, greases and waxes.. \$</b>	<b>6,795</b>	<b>2,949,656</b>	<b>5,091,895</b>	<b>34,931</b>
Miscellaneous animal products, n.o.p.—					
16	Eggs..... doz.	-	1,558,819	1,755,122	3
	\$	-	627,058	681,849	30
17	Gelatine and isinglass..... lb.	140,836	482,751	679,219	265,381
	\$	74,290	310,885	411,466	181,595
18	Glue, powdered or sheet and liquid..... \$	45,179	249,848	295,191	93,676
19	Honey and imitations thereof..... lb.	-	324,466	453,978	102,740
	\$	-	84,496	103,508	18,503
20	Sausage casings, n.o.p..... \$	17,502	202,084	372,113	7,726
	<b>Total animals and their products (except chemicals and fibres.)... \$</b>	<b>993,123</b>	<b>31,066,553</b>	<b>41,505,094</b>	<b>3,739,311</b>
III. Fibres, textiles and textile products.					
Cotton and its products—					
21	Cotton, wool or raw cotton, not dyed.... lb.	5,332	111,717,913	111,723,536	-
	\$	3,847	34,004,891	34,008,824	-
22	Crochet and knitting cotton..... lb.	221,832	192,296	414,299	323,786
	\$	355,814	143,211	499,411	639,680
23	Sewing cotton thread in hanks..... lb.	287,684	333,132	620,821	194,160
	\$	398,625	413,169	811,810	275,582
24	Sewing thread on spools..... \$	167,026	359,100	533,723	95,162
25	Yarn, cotton, No. 40 and finer..... lb.	621,509	1,620,555	2,242,064	868,490
	\$	839,109	2,000,398	2,839,507	1,413,941
26	Yarn, cotton, polished or glazed..... lb.	38,848	139,229	178,077	17,563
	\$	62,419	125,046	187,465	28,567

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
46,293,256 14,405,277	46,305,353 14,407,467	- -	22,402,444 3,862,311	22,402,444 3,862,311	3,585 611	28,595,181 4,443,123	28,600,126 4,443,933	1
4,973,539 1,384,409 585,280 162,972	4,977,954 1,385,965 1,017,871 331,727	303 111 1,130,112 304,180	6,817,359 1,545,380 450,719 134,857	6,823,423 1,548,084 2,026,085 557,811	1,200 496 817,478 193,090	6,901,466 1,242,414 475,227 117,953	6,902,688 1,242,918 2,251,556 492,218	2 3 3
13,303,215 3,150,515 697,284	13,311,133 3,153,659 755,352	- - 10,242	12,908,149 2,172,715 795,300	12,911,847 2,173,799 818,409	400 75 1,630	9,422,215 978,033 769,450	9,424,560 978,468 772,202	4 5
21,379,862	22,100,333	368,495	10,128,794	11,428,483	303,322	8,395,529	9,002,611	
188,271 96,098 1,142,383 145,799 349,488 194,791	397,955 176,994 1,234,635 159,177 362,693 206,500	112 49 224 125 7,491 4,582	2,207,077 886,555 170,954 23,571 453,882 206,585	3,741,628 1,805,709 1,043,713 129,017 551,040 253,647	2,163,984 621,779 - - 26,546 11,801	1,363,021 453,306 105,062 11,697 724,981 226,390	6,078,882 1,883,013 217,613 19,689 877,357 325,297	6 7 8
465,877	572,053	6,352	1,182,180	2,255,561	646,774	742,767	2,288,273	
279,059 609,919 46,805 62,238 7,293,358 1,720,076 2,374,186 480,575 7,511,137 1,141,225 1,094,914 124,912 6,497,031 1,872,104	279,059 609,919 162,040 262,078 7,293,438 1,720,088 2,467,511 500,325 9,657,763 1,379,829 1,186,011 135,552 6,497,031 1,872,104	9,086 11,935 655 2,133 - - 264,412 70,271 637,220 57,013 169,554 14,916 - -	175,734 267,830 50,844 55,845 11,493,226 1,902,768 2,980,996 397,121 13,574,343 1,459,783 718,712 73,048 4,630,747 1,206,351	184,720 279,765 201,568 278,340 11,493,226 1,902,768 3,245,408 467,392 14,310,759 1,532,550 906,395 91,265 4,630,747 1,206,351	199 235 524 632 56 11 310,416 39,570 18,086 1,332 185,185 7,337 6,000 1,399	66,457 59,831 34,606 21,022 9,091,109 948,068 2,778,063 253,410 16,442,645 1,044,309 809,994 57,836 1,339,784 255,994	66,709 60,192 128,490 71,844 9,091,245 948,087 3,088,479 292,980 16,524,853 1,049,222 1,004,616 65,531 1,345,784 257,393	9 10 11 12 13 14 15
6,155,279	6,659,263	183,681	5,448,882	5,896,714	56,641	2,674,528	2,792,790	
5,900,279 2,814,484 550,066 377,232 369,255 126,625 35,106 223,418	5,977,480 2,837,442 983,988 663,228 471,509 281,838 63,272 364,489	1 15 402,119 273,945 150,064 39,144 5,939 2,133	5,201,417 2,292,912 422,030 302,313 531,917 203,936 42,640 234,912	5,341,936 2,344,297 1,103,800 756,568 701,877 683,149 128,751 395,401	6 39 267,679 119,922 102,247 10,947 1,845 -	9,377,769 3,162,143 230,224 222,013 158,189 407,306 75,099 236,946	9,637,303 3,239,480 747,887 461,100 295,385 555,989 92,534 313,844	16 17 18 19 20
77,010,313	95,098,743	5,148,873	43,911,179	61,722,390	3,092,895	36,118,620	46,645,789	
96,471,550 33,854,457 142,634 144,111 207,501 303,729 332,231 1,080,144 1,538,809 236,032 198,838	96,471,550 33,854,457 467,915 787,980 401,661 579,311 429,623 1,948,634 2,952,750 253,595 227,405	312 156 268,985 783,885 325,102 731,229 179,970 1,786,252 4,098,071 78,405 159,467	97,903,804 28,164,088 77,713 108,251 201,585 396,759 377,137 948,071 1,949,410 189,695 198,702	98,631,504 28,541,989 352,529 906,157 526,687 1,127,988 571,634 2,739,433 6,054,981 268,100 358,169	276,971 69,145 17,892 47,152 393,905 422,906 70,729 1,125,451 1,115,769 3,873 4,692	94,961,143 16,207,537 57,746 71,031 210,170 238,249 215,348 1,240,100 1,266,305 254,869 129,727	95,385,978 16,321,317 93,603 145,397 604,146 661,294 315,395 2,371,419 2,395,075 258,742 134,419	21 22 23 24 25 26



**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
<b>III. Fibres, textiles and textile products—con.</b>					
Cotton and its products—concluded.					
1	Yarn, knitting, hosiery yarn, etc. .... lb.	94,812	1,039,356	1,137,074	96,315
	\$	155,220	742,587	901,065	138,290
2	Other cotton thread, n.o.p. .... lb.	10,632	180,626	192,547	36,281
	\$	18,761	242,853	263,226	63,805
3	Fabrics printed, dyed or coloured. .... yd.	16,321,696	26,849,670	43,737,679	17,356,047
	\$	5,046,691	6,990,071	12,157,316	7,261,336
4	Grey unbleached cotton fabrics. .... yd.	1,201,990	7,280,215	8,486,765	1,695,969
	\$	155,835	926,549	1,082,826	343,122
5	Uncoloured cotton fabrics, bleached, etc. yd.	1,000,816	135,336	1,136,152	2,195,428
	\$	52,311	17,362	69,673	655,987
6	White or bleached cotton fabrics. .... yd.	5,940,916	7,774,656	13,809,688	3,098,274
	\$	1,173,529	1,725,215	2,921,405	869,886
7	Towelling and towels. .... \$	610,138	327,776	985,466	1,304,228
8	Velvets, velveteens and plush fabrics. .... yd.	2,295,777	596,895	3,141,001	1,343,258
	\$	1,568,942	659,182	2,453,167	965,479
9	Laces and embroidery. .... \$	1,323,321	1,152,125	2,892,747	1,774,322
10	Wearing apparel. .... \$	327,587	3,607,608	4,212,201	523,792
<b>Total cotton and its products. .... \$</b>		<b>14,769,293</b>	<b>59,148,319</b>	<b>75,260,504</b>	<b>19,339,240</b>
Flax, hemp and jute—					
11	Jute or hemp yarn, dyed or coloured. .... lb.	76,946	3,622,023	3,698,969	2,848,642
	\$	22,762	679,424	702,186	617,598
12	Jute cloth or jute canvas, uncoloured. .... yd.	2,460,680	4,677,690	64,900,679	18,962,464
	\$	492,252	840,089	8,505,893	3,574,781
13	Other manufactures of. .... \$	2,440,362	1,983,835	4,585,809	4,023,088
<b>Total flax, hemp and jute. .... \$</b>		<b>2,955,376</b>	<b>3,503,349</b>	<b>13,793,888</b>	<b>8,215,467</b>
Silk and its products—					
14	Silk, raw. .... lb.	7,171	232,527	241,036	27,118
	\$	35,112	1,514,917	1,558,392	149,754
15	Silk fabrics of which silk is the chief component part. .... \$	34,433	730,353	842,703	19,412
16	Silk fabrics, n.o.p. .... \$	919,821	8,170,632	15,901,018	1,637,210
17	Clothing, silk, n.o.p. .... \$	86,982	990,015	1,283,579	168,140
18	Ribbons, all kinds and materials. .... \$	261,243	1,481,545	1,869,669	389,496
<b>Total silk and its products. .... \$</b>		<b>1,646,597</b>	<b>13,971,575</b>	<b>23,053,261</b>	<b>3,272,348</b>
Wool and its products—					
19	Wool, raw. .... lb.	350,263	527,813	15,878,832	3,674,511
	\$	202,722	513,785	9,228,051	2,510,145
20	Noils and waste and worsted tops. .... \$	4,930,688	693,956	5,625,090	4,148,050
21	Yarns composed wholly or in part of wool, worsted, the hair of the goat, etc. .... lb.	1,859,951	173,311	2,033,262	1,738,834
	\$	3,047,060	390,100	3,437,160	3,332,307
22	Yarns, woollen or worsted, n.o.p. .... lb.	272,029	13,172	286,356	240,560
	\$	486,396	24,541	518,221	571,283
23	Carpets and rugs. .... \$	293,876	304,006	623,520	980,464
Cloths and dress goods—					
24	Cassimeres, cloths and doeskins. .... yd.	983,268	493,329	1,478,773	-
	\$	2,470,811	1,073,742	3,551,034	2,979,764
25	Coatings and overcoatings. .... yd.	408,428	41,932	450,360	58,717
	\$	1,056,091	111,763	1,167,854	163,382
26	Fabrics of wool, or cotton and wool. .... yd.	2,027,795	56,367	2,084,162	2,515,403
	\$	1,360,292	31,762	1,392,054	2,024,231
27	Tweeds. .... yd.	505,938	65,794	571,732	2,030,392
	\$	784,622	103,907	888,529	4,033,443
28	Women's and children's dress goods, etc. sq. yd.	2,575,173	41,232	2,630,464	3,890,395
	\$	1,958,456	41,251	2,013,788	4,696,049
29	Worsteds and serges, including coatings <sup>1</sup> . .... yd.	-	-	-	4,003,100
	\$	-	-	-	10,061,336
Wearing apparel—					
30	Clothing, women's and children's. .... \$	106,509	1,136,416	1,246,919	190,718
31	Socks and stockings, wool. .... \$	492,211	74,965	567,401	973,081
32	Clothing, ready-made. .... \$	339,285	491,962	832,103	619,608
<b>Total wool and its products. .... \$</b>		<b>23,567,074</b>	<b>8,139,059</b>	<b>40,298,998</b>	<b>38,555,688</b>

<sup>1</sup>Included with coatings and overcoatings in 1919.

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
1,063,738	1,164,639	245,034	861,028	1,115,352	126,827	521,818	650,333	1
753,102	898,355	345,764	684,863	1,078,063	75,770	204,688	286,005	2
205,614	248,424	53,356	120,307	181,288	25,930	236,416	265,321	3
311,942	381,572	144,142	209,962	371,749	47,809	333,958	386,762	4
35,733,790	53,416,341	24,976,558	26,806,036	52,530,220	18,423,924	32,881,666	52,509,492	5
10,793,967	18,238,179	12,104,130	8,255,367	21,052,640	4,988,618	6,462,262	12,096,748	6
10,912,823	12,608,792	4,882,882	6,547,795	11,500,490	2,065,217	4,542,707	6,908,551	7
1,845,554	2,188,676	1,445,736	1,486,882	2,948,302	537,548	572,222	1,109,992	8
2,886,810	5,120,917	4,826,568	2,143,764	7,191,343	2,125,524	2,034,300	4,252,362	9
614,107	1,288,244	1,613,687	505,553	2,177,493	429,571	290,539	757,042	10
11,184,369	14,477,764	4,710,555	9,405,616	14,355,542	2,777,483	6,455,917	9,582,472	11
2,565,657	3,508,548	1,682,057	2,382,419	4,167,055	612,301	954,400	1,673,863	12
462,854	1,782,820	2,403,398	323,263	2,733,961	2,317,814	374,454	1,068,445	13
441,808	1,860,508	1,338,958	287,898	1,654,960	525,633	412,393	984,051	14
582,078	1,623,408	1,206,731	320,246	1,559,783	377,218	419,054	852,100	15
1,248,327	3,908,543	3,117,261	1,017,542	6,185,966	1,639,586	864,261	4,071,676	16
4,514,052	5,305,748	1,341,196	3,241,628	4,909,839	557,487	2,753,194	3,550,770	17
<b>68,219,372</b>	<b>89,367,984</b>	<b>37,103,816</b>	<b>58,384,465</b>	<b>99,816,594</b>	<b>14,016,757</b>	<b>35,251,452</b>	<b>52,477,828</b>	<b>18</b>
3,668,690	6,707,002	2,988,571	1,751,420	4,950,637	1,512,288	1,030,876	2,638,368	19
740,688	1,445,775	776,800	444,987	1,331,562	145,607	142,924	326,407	20
9,408,967	63,563,938	9,229,825	3,922,950	61,242,124	5,622,863	21,528,599	68,302,717	21
1,335,655	8,632,787	2,500,568	299,054	6,574,298	699,832	1,128,535	3,879,462	22
1,656,569	5,845,274	5,271,986	1,285,630	7,020,258	2,617,323	1,004,979	3,855,498	23
<b>3,732,912</b>	<b>15,923,836</b>	<b>8,549,354</b>	<b>2,029,671</b>	<b>11,926,119</b>	<b>3,462,762</b>	<b>2,276,438</b>	<b>8,061,367</b>	<b>24</b>
313,614	343,668	13,628	291,398	318,279	7,950	364,941	394,029	25
3,228,511	3,404,500	101,898	2,409,120	2,615,422	34,754	2,501,394	2,655,756	26
1,491,626	1,755,772	95,498	591,513	1,428,172	49,758	288,189	753,562	27
5,779,355	20,888,357	1,866,753	2,370,214	16,832,938	887,163	2,847,239	13,270,916	28
1,716,357	2,180,907	321,231	984,976	1,611,595	163,606	1,077,018	1,563,553	29
1,596,053	2,844,386	635,428	868,270	3,882,360	168,534	692,359	1,881,919	30
<b>15,866,297</b>	<b>34,432,789</b>	<b>4,272,850</b>	<b>8,690,263</b>	<b>29,720,792</b>	<b>1,823,796</b>	<b>8,275,412</b>	<b>21,942,338</b>	<b>31</b>
5,110,606	11,777,890	2,110,738	6,670,530	9,285,663	5,373,720	2,805,468	12,586,695	32
3,464,216	7,672,211	1,677,482	3,071,117	5,088,665	1,591,771	644,366	3,160,302	33
1,665,839	6,176,394	5,154,467	1,051,577	6,673,288	2,714,797	211,112	3,357,699	34
174,007	1,932,760	2,755,525	110,615	2,882,166	1,765,523	16,481	1,798,759	35
402,557	3,742,087	6,253,721	158,340	6,454,633	1,982,356	24,072	2,034,893	36
79,776	321,896	305,587	43,713	349,125	241,983	27,154	270,377	37
71,335	653,970	837,610	64,235	919,535	362,745	44,588	418,106	38
382,751	1,437,939	2,102,583	270,205	2,597,358	1,106,830	258,548	1,559,610	39
2,557,951	5,598,264	3,128,107	1,322,393	4,674,100	1,705,781	653,527	2,729,954	40
76,642	135,359	64,925	3,403	69,031	46,341	2,142	49,049	41
126,550	289,932	199,501	10,576	211,820	77,601	5,367	84,003	42
80,016	2,595,419	1,789,598	10,826	1,800,424	1,936,077	11,668	1,949,745	43
71,886	2,096,117	1,664,341	16,854	1,681,195	1,191,072	15,136	1,208,155	44
2,222,791	4,265,399	2,139,688	420,268	2,585,883	1,706,666	191,246	1,925,303	45
3,089,115	7,158,551	4,513,330	794,727	5,378,147	2,072,431	329,751	2,448,274	46
56,222	4,044,853	5,577,529	658	4,921,659	3,783,880	1,600	3,917,642	47
43,138	4,951,614	5,418,919	1,584	5,808,510	1,719,411	819	1,834,304	48
3,665,824	7,685,015	5,238,820	1,103,932	6,453,434	5,297,056	566,657	6,053,591	49
6,201,993	16,303,136	14,566,067	2,252,381	17,097,360	9,001,126	1,032,920	10,329,758	50
2,225,566	2,430,866	268,642	1,293,434	1,586,551	234,284	1,310,254	1,569,205	51
172,943	1,146,065	2,783,319	80,892	2,864,938	1,329,983	40,436	1,371,731	52
859,671	1,479,768	1,286,794	600,262	1,889,869	894,196	364,161	1,267,454	53
<b>22,399,955</b>	<b>63,493,535</b>	<b>52,767,847</b>	<b>12,092,437</b>	<b>67,017,640</b>	<b>27,232,945</b>	<b>5,422,910</b>	<b>35,227,691</b>	<b>54</b>

12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-22.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>III. Fibres, textiles and textile products—concluded.</b>					
Vegetable fibres and their products—					
1	Binder twine..... lb.	—	22,374,574	22,374,574	100
	\$	—	5,457,632	5,457,632	29
2	Manila grass..... cwt.	4,524	306,692	314,150	109
	\$	70,386	6,078,106	6,216,817	3,803
3	Sisal grass..... cwt.	—	—	—	28,872
	\$	—	—	—	416,891
Mixed textile products—					
4	Rags and waste..... \$	29,617	254,627	284,244	343,648
5	Yarn..... lb.	61,562	97,664	161,206	278,886
	\$	213,495	499,534	723,653	1,037,540
6	Oil cloth, all kinds..... \$	322,398	2,111,563	2,435,098	469,632
7	Cordage and twines..... \$	1,171,242	1,845,133	3,100,533	1,120,119
8	Curtains and shams..... \$	174,619	184,072	367,320	216,219
9	Webbing, elastic, over one-inch wide..... \$	6,443	301,876	308,478	13,911
Wearing apparel (knit and woven), hats and caps—					
10	Braids or plaits of chips, palm leaf, etc... \$	29,564	394,330	667,289	146,626
11	Hatters' bands (not cords) bindings and hat sweats, etc. \$	21,242	279,526	305,056	33,027
12	Hats, caps and bonnets, straw, grass or chip..... \$	298,526	1,842,950	2,167,953	301,226
13	Hats, caps and bonnets, beaver, silk or felt..... \$	144,613	844,704	1,129,674	204,354
14	Hats, caps and bonnets, n.o.p..... \$	—	—	—	151,250
15	Corsets, all kinds..... \$	1,970	374,446	376,914	14,385
16	Gloves and mitts..... \$	—	—	—	195,910
17	Knitted goods of every description..... \$	76,096	238,599	320,022	198,491
18	Dressing, antiseptic surgical, etc..... \$	169,657	459,192	629,408	35,842
<b>Total fibres, textiles and textile products..... \$</b>		<b>45,968,360</b>	<b>106,768,458</b>	<b>172,190,241</b>	<b>74,653,042</b>
<b>IV. Wood, wood products and paper.</b>					
Books and printed matter—					
19	Newspapers and quarterly, monthly and semi-monthly magazines..... \$	44,129	2,010,310	2,054,729	40,529
20	Photographs, chromos, etc..... \$	59,774	559,348	625,990	94,446
21	Advertising pamphlets, etc..... \$	15,070	835,863	851,662	33,434
22	Bank notes, bonds, bills of exchange..... \$	10,918	389,293	403,527	19,631
23	Labels for cigar boxes, fruits, etc..... \$	49,869	430,396	481,816	55,519
24	Bibles, prayer books, etc..... \$	194,527	149,832	389,137	205,039
<b>Total books and printed matter... \$</b>		<b>815,688</b>	<b>7,502,261</b>	<b>8,496,934</b>	<b>1,039,609</b>
Paper and manufactures of—					
25	Cardboard, millboard, strawboard, news-board, etc..... \$	930	929,257	930,187	2,382
26	Book and printing paper, not coated..... lb.	38,475	6,217,162	6,259,327	48,270
	\$	11,851	600,635	613,052	15,000
27	Wrapping paper, all kinds..... lb.	4,282	5,678,090	5,696,059	106
	\$	501	328,263	330,171	118
28	Hangings or wall paper..... roll	11,984	1,767,382	1,780,441	26,229
	\$	5,512	248,043	255,273	12,852
29	Boxes or containers, printed or not..... \$	2,754	862,072	883,328	14,901
<b>Total paper and manufactures (except books and printed matter)... \$</b>		<b>243,771</b>	<b>8,424,048</b>	<b>8,886,393</b>	<b>317,740</b>
Wood and wood products, unmanufactured or partially manufactured—					
30	Fence posts and railroad ties..... \$	—	1,599,825	1,599,825	—
31	Cherry, chestnut and hickory..... M ft	—	29,655	29,655	—
	\$	—	1,281,584	1,281,584	—
32	Mahogany..... ft.	—	649,355	689,790	—
	\$	—	109,550	113,171	—
33	Oak..... M ft.	—	48,908	48,911	1
	\$	—	2,532,913	2,533,325	51
34	Pitch pine..... M ft.	—	67,601	67,601	—
	\$	—	2,364,923	2,364,923	—

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
16,304,178	16,304,479	—	34,641,459	34,755,071	106,660	46,651,936	46,758,792	1
3,490,468	3,490,524	—	5,466,395	5,480,897	17,842	7,351,011	7,368,892	
148,460	152,619	—	78,039	87,838	—	21,010	42,249	2
1,945,353	1,982,324	—	1,405,797	1,515,962	—	185,094	329,545	
272,077	301,238	21,884	342,612	365,916	18,032	126,934	145,272	3
2,792,820	3,213,488	276,562	2,770,810	3,060,571	182,503	854,743	1,038,494	
2,140,604	2,484,410	589,426	1,674,206	2,273,720	85,177	624,136	724,702	4
73,092	360,297	301,348	112,492	512,109	285,778	186,122	570,450	5
365,235	1,436,738	1,179,213	403,782	2,037,142	695,173	435,251	1,347,871	
2,053,906	2,523,870	1,132,786	1,305,136	2,438,543	490,143	764,999	1,258,679	6
1,826,093	2,988,800	1,886,741	1,576,002	3,517,835	961,049	856,917	1,872,032	7
241,981	474,779	384,622	156,456	636,957	225,833	120,465	406,233	8
533,572	547,552	50,045	531,216	589,280	19,940	361,524	381,491	9
615,842	1,070,521	147,598	401,831	1,258,935	45,545	283,288	560,070	10
522,298	580,556	61,393	411,594	719,666	34,283	361,790	544,389	11
1,083,426	1,433,924	425,397	693,119	1,171,407	261,651	626,749	948,729	12
1,142,538	1,500,250	463,906	698,851	1,642,720	383,943	563,618	1,054,584	13
1,108,969	1,282,159	318,610	860,159	1,242,302	160,742	767,249	969,587	14
334,656	350,769	16,587	286,045	303,232	2,994	272,742	276,412	15
104,068	337,287	596,904	103,360	789,380	193,827	113,983	437,280	16
385,252	607,603	386,438	429,848	861,671	189,782	782,974	993,050	17
276,537	312,940	120,715	339,024	461,181	85,844	246,881	336,761	18
132,292,083	231,559,877	111,348,051	101,738,045	243,608,342	50,892,567	67,659,112	139,997,137	
2,378,283	2,420,576	43,705	2,625,625	2,672,585	47,911	2,557,432	2,607,312	19
801,094	907,986	154,837	1,081,202	1,257,569	124,944	868,821	1,022,184	20
1,375,364	1,411,925	68,968	1,735,815	1,807,330	64,548	1,731,942	1,814,055	21
442,512	468,438	22,031	646,302	674,950	23,816	471,616	501,769	22
508,777	568,712	72,872	621,108	702,029	41,571	463,795	508,788	23
176,704	481,962	234,786	189,690	665,074	252,933	183,767	660,184	24
9,899,147	11,240,814	1,794,318	11,113,768	13,575,457	1,727,336	9,884,329	12,173,175	
929,980	932,362	39,687	1,655,821	1,697,548	15,445	825,883	842,193	25
5,386,458	5,434,828	366,504	6,953,832	7,321,606	172,979	4,924,509	5,145,500	26
600,825	615,999	75,770	870,344	946,488	34,234	416,342	455,530	
5,231,697	5,259,482	203,975	6,501,440	6,785,824	149,460	3,902,140	4,063,613	27
502,887	511,136	31,115	717,550	795,320	17,712	246,189	266,063	
2,073,058	2,100,679	72,573	1,783,040	1,869,849	81,335	1,096,429	1,193,260	28
340,525	355,272	45,350	458,010	512,071	36,678	243,806	289,234	
1,003,130	1,039,259	32,871	1,405,262	1,473,436	19,507	742,732	803,075	29
9,303,956	9,936,778	851,508	12,239,324	13,636,399	598,567	6,812,575	7,937,605	
1,105,348	1,105,348	—	1,749,192	1,749,192	—	1,835,196	1,835,196	30
14,929	14,929	—	10,024	10,024	—	6,095	6,095	31
932,018	932,018	—	1,136,901	1,136,901	—	481,568	481,568	
1,757,619	1,757,619	1,230	2,146,590	2,258,002	31,399	675,989	707,988	32
320,492	320,492	638	548,325	561,371	6,743	128,975	135,718	
46,843	46,844	—	37,327	37,418	—	20,552	20,599	33
3,319,218	3,319,269	—	4,506,207	4,517,795	—	1,541,668	1,548,494	
29,541	29,541	—	37,468	37,468	—	27,895	27,895	34
1,034,053	1,034,053	—	1,773,164	1,773,164	—	724,657	724,657	



12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>IV. Wood, wood products and paper—concluded.</b>					
Wood and wood products, unmanufactured or partially manufactured—con.					
1	Lumber, rough sawn, or dressed on one side only.....M. ft.	—	66,826	66,960	1
	\$	—	2,493,598	2,504,926	113
2	Veneers of oak, rosewood, mahogany, etc.....\$	—	324,594	324,594	201
<b>Total wood products, unmanufactured or partially manufactured \$</b>		<b>1,991</b>	<b>13,289,775</b>	<b>13,347,387</b>	<b>10,375</b>
Wood and wood products, manufactured—					
3	Barrels, empty.....No.	6	105,369	106,517	786
	\$	18	125,308	126,435	997
4	Staves of oak, sawn, split or cut.....M	—	4,860	4,860	—
	\$	—	276,156	276,156	—
5	Corks.....lb.	8,418	76,133	210,761	21,044
	\$	9,270	58,627	107,093	20,358
Wood pulp and fibre—					
6	Fibre, kartavert, indurated fibre, etc....\$	263	271,312	271,607	96
7	Soda pulp.....lb.	—	1,745,544	1,745,544	—
	\$	—	80,624	80,624	—
8	Unbleached sulphite pulp.....lb.	—	18,875,030	18,875,030	—
	\$	—	377,543	377,543	—
9	Wood pulp, mechanically or chemically prepared.....lb.	—	2,769,631	2,769,631	7,164
	\$	—	52,829	52,829	1,870
10	Furniture, house, office, cabinet, etc.....\$	—	—	—	59,955
<b>Total wood, wood products and paper</b>		<b>1,116,407</b>	<b>33,680,584</b>	<b>35,389,852</b>	<b>1,515,780</b>
<b>V. Iron and its products.</b>					
11	Iron ore.....ton	—	1,386,933	2,227,919	—
	\$	—	5,048,456	5,932,001	—
Agricultural implements—					
12	Cream separators and steel bowls for....\$	730	594,083	651,991	28,300
13	Cream separators, materials for.....\$	—	546,491	569,806	2,561
14	Harvesters, self-binding.....No.	—	2,508	2,508	—
	\$	—	439,638	439,638	—
15	Mowing machines.....No.	—	1,464	1,464	—
	\$	—	90,580	90,580	—
16	Potato diggers.....No.	—	1,024	1,024	—
	\$	—	66,690	66,690	—
17	Cultivators and weeders and parts of....\$	—	162,208	162,208	—
18	Drills, seed.....No.	—	6,196	6,196	—
	\$	—	201,460	201,460	—
19	Harrows and parts of.....\$	—	403,670	403,670	31
20	Ploughs and parts of.....\$	—	2,513,059	2,513,059	20
21	Threshing machine separators.....No.	—	1,226	1,226	—
	\$	—	1,006,062	1,006,062	—
22	Threshing machine separators, parts of...\$	—	397,095	397,095	164
<b>Total agricultural implements...\$</b>		<b>10,557</b>	<b>8,903,930</b>	<b>8,995,011</b>	<b>51,127</b>
Boilers, engines, pumps and windmills—					
23	Boilers, steam and parts of.....\$	55,154	216,805	271,959	64,155
24	Boilers, n.o.p. and parts of.....\$	286	147,860	148,146	7,839
Engines—					
25	Engines, automobile <sup>1</sup> .....No.	—	—	—	—
	\$	—	—	—	—
26	Engines, gas and gasoline.....No.	35	48,181	48,216	157
	\$	10,238	6,369,355	6,379,593	40,979
27	Engines, steam.....No.	2	180	182	11
	\$	4,313	280,066	284,379	5,929
28	Locomotives for railways.....No.	—	79	79	—
	\$	—	631	31	—

Included with engines, gas and gasoline in 1919.

12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
76,702	76,767	1	49,320	49,510	—	48,569	48,787	1
3,016,974	3,021,015	114	3,107,519	3,119,994	152	1,631,840	1,640,604	
549,767	549,968	17	649,845	649,862	—	264,834	264,834	2
14,433,192	14,507,557	69,235	18,877,713	19,024,778	24,582	9,259,584	9,364,065	
276,077	277,985	1,425	202,496	205,077	117	126,223	127,016	3
352,127	354,215	1,871	323,370	326,970	257	153,302	155,150	
6,640	6,640	—	6,639	6,369	—	2,814	2,814	4
383,928	383,928	—	459,106	459,106	—	184,283	184,283	
112,456	338,229	43,062	97,394	526,018	33,884	45,445	251,914	5
97,469	195,942	45,877	79,138	330,719	33,581	43,730	185,270	
442,558	442,656	2,299	478,073	480,389	1,063	299,169	300,450	6
1,654,209	1,654,209	—	1,415,561	1,415,561	—	813,791	813,791	
77,056	77,056	—	94,898	94,898	—	35,156	35,156	7
23,348,342	23,448,342	—	28,986,667	28,986,667	—	27,034,427	27,034,427	
477,070	477,070	—	1,301,266	1,301,266	—	1,009,905	1,009,905	8
1,152,956	1,160,120	2,145	19,764,137	19,766,282	2,800	466,135	468,935	
51,445	53,315	652	1,270,841	1,271,493	842	19,437	20,279	9
1,343,984	1,461,411	112,064	1,433,518	1,686,159	101,537	947,872	1,219,689	
40,719,024	43,183,267	3,144,574	52,359,847	57,449,384	2,657,020	31,424,411	35,791,487	10
1,144,430	1,632,011	—	1,305,512	1,950,291	—	509,185	656,902	
4,093,839	4,601,716	—	5,038,900	5,995,038	—	1,721,438	1,936,247	11
733,038	796,096	101,557	721,652	992,404	25,699	211,531	325,755	
641,210	643,852	11,707	1,105,208	1,116,915	630	436,693	439,067	12
1,661	1,661	—	5,485	5,485	—	1,316	1,316	
316,657	316,657	—	1,001,575	1,001,575	—	319,807	319,807	13
848	848	—	1,271	1,271	—	522	522	
54,463	54,463	—	79,275	79,275	—	36,143	36,143	14
698	698	—	1,298	1,298	—	259	259	
53,015	53,015	—	101,267	101,267	—	23,618	23,618	15
78,432	78,432	—	177,170	177,170	112	62,583	62,695	
4,083	4,083	2	3,102	3,106	—	790	792	16
233,459	233,459	150	211,345	211,580	—	38,041	38,079	
255,357	255,388	216	382,554	382,770	168	71,010	71,178	17
1,795,438	1,795,598	12	2,526,472	2,526,503	41	554,705	554,846	
911	911	—	1,767	1,767	—	1,934	1,934	18
808,059	808,059	—	1,534,572	1,534,572	—	2,187,872	2,187,872	
442,505	442,669	135	1,056,794	1,056,929	—	550,337	550,337	19
6,792,245	6,878,752	145,843	11,430,226	11,758,491	59,503	5,326,141	5,479,517	
164,250	228,414	346,824	232,461	570,235	59,262	65,383	124,645	20
209,924	217,763	21,250	260,973	282,223	6,560	151,233	157,793	
42,434	42,434	—	20,087	20,087	1	12,176	12,177	21
8,402,351	8,402,351	1,028	5,387,416	5,388,444	2,087	3,117,839	3,119,926	
29,414	29,535	297	14,330	14,627	162	4,722	4,855	22
2,960,728	3,004,442	82,673	2,175,077	2,257,870	70,161	899,338	970,402	
244	255	13	144	157	5	68	73	23
454,403	460,332	61,214	443,968	505,182	23,695	184,072	212,767	
55	55	—	52	52	1	21	22	24
523,732	523,732	—	542,643	542,643	4,816	110,320	115,136	

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
	<b>V. Iron and its products—con.</b>				
	Engines—concluded.				
1	Portable engines with boilers in combination and traction engines for farm purposes..... No.	-	627	627	-
	\$	2,134	1,480,304	1,482,438	-
2	Traction engines, gas or gasoline for farm purposes, costing not more than \$1,400.. No.	-	14,480	14,480	-
	\$	-	14,078,663	14,078,663	-
3	Pumps, hand, n.o.p..... No.	-	18,352	18,352	22
	\$	-	206,402	206,402	444
4	Pumps, power and parts of..... No.	32	6,343	6,377	39
	\$	28,769	906,722	935,802	37,361
	<b>Total boilers, engines, wind-mills and pumps..... \$</b>	<b>100,894</b>	<b>25,738,608</b>	<b>25,839,763</b>	<b>158,297</b>
5	Castings..... \$	9,302	1,938,874	1,943,584	43,336
6	Chains..... \$	36,503	504,465	601,732	298,792
	Cutlery—				
7	Knives and forks of steel, plated or not... \$	51,398	150,860	202,402	139,859
8	Pen knives, jack-knives and pocket-knives \$	32,045	216,298	271,405	229,942
9	All other cutlery..... \$	80,077	502,576	601,428	164,204
	Hardware—				
10	Builders', cabinet makers', etc..... \$	9,186	523,845	533,622	28,673
11	Locks of all kinds..... \$	1,574	407,403	418,189	8,127
12	Butts, and hinges..... \$	41	85,600	85,641	1,85
13	Nails, spikes and tacks..... \$	2	395,193	395,196	51
14	Needles and pins..... \$	150,763	256,111	433,905	215,958
15	Nuts, rivets and bolts, etc..... \$	2,626	585,461	588,089	4,382
	<b>Total cutlery and hardware..... \$</b>	<b>369,468</b>	<b>3,273,611</b>	<b>3,740,876</b>	<b>819,430</b>
16	Excavation and road machinery—				
	Scrapers, railroad and road..... \$	-	61,350	61,350	-
17	Steam shovels and electric shovels..... \$	-	205,598	205,598	-
	Household machinery—				
18	Carpet sweepers and hand vacuum No.	-	18,264	18,264	-
	cleaners..... \$	-	97,659	97,659	-
19	Sewing machines..... No.	1,227	9,230	10,457	2,079
	\$	32,334	267,719	300,053	59,572
20	Sewing machines, parts of..... \$	5,640	392,707	398,347	26,956
21	Washing machines, domestic..... No.	-	11,923	11,923	-
	\$	-	276,921	276,921	-
22	Mining machinery—				
	Mining, smelting and reducing machinery, etc..... \$	14,097	751,325	765,422	18,851
23	Ore crushers and rock crushers, stamp mills, etc..... \$	68,680	753,248	821,928	14,597
	Office or business machinery—				
24	Adding and calculating machines..... No.	-	1,554	1,554	-
	\$	-	557,364	557,364	-
25	Cash registers and parts of..... \$	-	120,470	120,470	-
26	Typewriting machines..... No.	1	12,048	12,054	3
	\$	25	787,561	787,666	108
	Printing and bookbinding machinery—				
27	Machines, specially designed for ruling, etc..... \$	213	375,458	375,671	1,320
28	Newspaper printing presses..... No.	-	46	46	-
	\$	-	237,080	237,080	-
29	Printing presses and lithographic presses \$	275	481,100	481,375	525
30	Typecasting and typesetting machines, etc..... \$	2,265	746,536	748,801	45
	Other machinery—				
31	Air-compressing machines <sup>1</sup> ..... \$	-	-	-	74,139
32	Coal-handling machines..... \$	25,441	357,572	383,013	600
33	Cranes and derricks..... No.	-	111	111	15,626
	\$	-	503,849	503,849	-
34	Cyclometers, pedometers, etc..... \$	-	143,731	143,731	-
35	Fire-extinguishing machines, etc..... \$	-	117,127	117,127	97
36	Lathes, power..... \$	-	-	-	12,448
37	Machine drills..... \$	-	-	-	65,382

<sup>1</sup>Included with ore and rock crushers in 1919.

12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
422	422	—	1,003	1,003	—	109	109	1
1,282,285	1,282,285	6,276	2,440,045	2,446,321	3,484	522,175	525,659	2
6,797	6,797	—	11,402	11,402	3	1,768	1,771	3
5,916,926	5,916,926	—	10,160,949	10,160,949	4,016	1,340,016	1,344,032	4
28,888	28,910	241	22,956	23,854	443	15,060	15,558	5
247,478	247,922	3,411	293,451	298,901	2,369	254,631	257,334	6
5,868	5,907	143	6,134	6,280	61	4,090	4,154	7
910,713	948,074	52,586	1,201,506	1,255,244	73,415	683,209	762,847	8
22,705,319	22,866,351	576,654	25,220,438	25,800,403	258,017	8,289,063	8,554,540	9
1,958,311	2,001,765	46,713	2,336,215	2,383,662	89,622	1,171,193	1,291,561	10
709,278	1,008,890	308,571	994,189	1,304,654	99,307	361,648	464,288	11
266,424	407,493	417,256	301,742	723,916	284,979	118,023	411,460	12
192,882	459,792	563,927	104,297	704,225	380,492	28,485	463,798	13
517,422	702,340	449,824	543,927	1,056,626	236,980	324,346	635,512	14
657,472	686,200	79,203	703,950	784,815	51,323	391,560	442,919	15
560,380	579,784	22,511	676,418	702,142	10,731	320,823	333,203	16
116,300	118,153	1,564	164,078	165,642	3,113	88,341	91,544	17
170,103	170,223	2,769	300,337	303,578	427	232,192	233,659	18
308,126	533,631	342,189	287,730	636,105	216,212	206,303	427,354	19
457,580	461,962	8,127	569,994	578,170	4,222	317,496	321,873	20
3,395,496	4,309,529	1,938,585	3,815,885	5,899,877	1,209,022	2,094,983	3,470,476	21
138,707	138,707	—	109,018	109,018	—	28,524	28,524	22
398,195	398,195	—	569,722	569,722	—	238,691	238,691	23
18,985	18,985	4	8,161	8,165	9	8,715	8,724	24
280,541	280,541	36	154,725	154,761	174	176,960	177,134	25
13,875	15,956	2,275	8,806	11,081	1,076	4,258	5,334	26
512,129	571,770	83,890	377,559	461,449	43,123	265,178	308,307	27
494,257	521,213	62,841	613,038	675,969	82,723	407,083	489,806	28
10,697	10,697	1	9,469	9,470	—	4,860	4,860	29
485,975	485,975	21	615,465	615,486	—	349,207	349,207	30
864,654	884,780	26,873	658,501	691,094	14,698	597,967	612,665	31
408,118	422,715	59,400	729,420	788,820	52,324	557,008	609,332	32
2,133	2,133	—	2,606	2,622	—	1,603	1,607	33
923,512	923,512	—	953,253	955,373	—	298,554	300,137	34
225,994	225,994	—	322,007	322,007	—	227,431	227,431	35
15,397	15,403	58	14,792	14,853	3	10,421	10,431	36
1,042,345	1,042,531	3,046	998,481	1,001,587	214	630,986	631,356	37
519,975	521,295	8,384	777,007	791,029	29,362	268,627	302,248	38
81	81	—	94	94	—	36	36	39
365,127	365,127	—	648,377	648,377	—	318,055	318,055	40
582,103	582,628	7,172	982,937	991,128	46,252	644,957	694,124	41
899,994	900,039	248	1,244,256	1,244,504	2,237	886,371	888,715	42
249,639	323,778	41,960	263,219	305,179	23,319	152,207	175,526	43
102,777	103,377	1,759	166,818	168,577	29,433	137,441	166,874	44
121	121	4	104	108	1	68	69	45
1,005,199	1,020,825	31,560	848,157	879,717	4,607	427,905	432,512	46
253,190	253,860	152	178,290	178,442	66	192,051	192,117	47
159,544	159,641	—	151,098	151,098	—	42,548	42,909	48
741,330	753,778	22,763	542,246	565,337	10,577	116,091	130,182	49
975,034	1,040,416	187,915	744,169	932,084	26,552	206,758	233,395	50



12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
	<b>V. Iron and its products—con.</b>				
	Other machinery—con.				
1	Paper and pulp machinery..... \$	616	761,577	762,193	280,604
2	Rolling-mill machinery..... \$	—	420,792	420,792	—
3	Saw-mill machines..... \$	—	118,066	119,056	—
4	Textile machinery of a class or kind not made in Canada and parts of..... \$	127,577	2,081,151	2,209,228	218,272
5	Other machinery composed wholly or in part of iron or steel and parts of..... \$	353,058	16,144,397	16,527,451	578,050
	Rolling mill products—				
6	Rolled iron or steel and cast steel in bars, cwt. bands, hoops, etc..... \$	39,517	1,365,437	1,409,072	56,485
		1,310,379	10,059,372	11,419,193	920,740
7	Rolled iron or steel hoop, scroll or strip, cwt. No. 14 gauge and thinner..... \$	—	162,068	162,068	606
8	Rolled iron or steel hoop, band, scroll or cwt. strip, 14 gauge and thinner, galvanized. \$	—	780,096	780,096	3,241
		—	141,112	141,112	2,161
9	Steel, rolled, for saws and straw cutters, cwt. not tempered or ground..... \$	156	701,261	701,261	14,985
		4,019	21,315	21,291	1
10	Bar iron or steel, rolled..... cwt. \$	729	350,338	354,357	11
		2,768	1,034,292	1,035,021	—
11	Forgings of iron or steel..... lb. \$	56,803	3,211,132	3,213,900	—
		4,703	3,586,913	3,643,718	—
12	Iron and steel railway bars or rails..... ton \$	—	379,076	383,779	—
		—	10,236	10,236	—
13	Shafting, round, steel, in bars, etc..... cwt. \$	—	546,830	546,830	—
		—	47,817	47,817	—
		—	244,394	244,394	—
14	Plates and sheets—Boiler plate of iron or steel..... cwt. \$	1,301	267,708	269,009	473
		6,808	1,214,821	1,221,629	1,411
15	Canada plates, Russia iron, terne plate... cwt. \$	—	135,941	135,941	1,934
		—	745,016	745,016	15,485
16	Iron sheets and plates, tin..... cwt. \$	895	1,448,880	1,449,775	9,476
		11,176	11,263,164	11,274,340	118,661
17	Rolled iron or steel plates not less than 30 inches in width..... cwt. \$	—	487,549	487,549	—
		—	1,637,273	1,637,273	—
18	Rolled iron or steel plates or sheets, cwt. sheared or unsheared, etc..... \$	—	153,357	153,357	—
		—	573,364	573,364	—
19	Rolled iron or steel sheets, polished or cwt. not..... \$	260	785,371	785,631	15,120
		1,532	4,351,479	4,353,011	116,256
20	Sheets, flat, of galvanized iron or steel... cwt. \$	—	136,693	136,693	21,869
		—	809,100	809,100	163,883
21	Skelp iron or steel, sheared or rolled in cwt. grooves..... \$	—	1,329,151	1,329,151	—
		—	4,439,785	4,439,785	—
22	Rolled round wire rods of iron or steel... cwt. \$	—	891,002	891,002	—
		—	2,484,028	2,484,028	—
23	Rolled iron or steel angles, tees, beams, cwt. etc..... \$	460	610,645	611,105	271
		1,763	1,929,304	1,931,067	1,693
24	Rolled iron or steel angles, beams, channels and other rolled shapes, etc..... \$	682	1,142,466	1,143,148	—
		2,297	3,577,039	3,579,336	—
25	Steel plate..... cwt. \$	—	181,257	181,257	—
		—	594,355	594,355	—
26	Seamless steel or wrought-iron boiler tubes..... \$	16,388	2,176,229	2,192,617	67,653
	<b>Total rolling mill products..... \$</b>	<b>1,639,351</b>	<b>62,151,289</b>	<b>63,843,164</b>	<b>1,508,948</b>
27	Smelted products..... \$	2,124,757	4,436,713	6,590,629	266,742
28	Springs..... \$	319	407,103	407,583	791
29	Stamped and enamelled products..... \$	50,790	2,100,289	2,152,838	66,244
30	Tools and hand implements..... \$	16,908	1,519,337	1,538,859	95,466
	Vehicles, chiefly of iron—				
31	Automobiles, freight..... No. \$	3	1,741	1,744	7
		11,330	2,263,418	2,274,748	19,945
32	Automobiles, passenger..... No. \$	—	6,473	6,473	3
		—	5,326,510	5,326,510	8,134
33	Automobiles, parts of..... \$	11,995	6,648,775	6,660,770	14,034
	<b>Total vehicles, chiefly of iron..... \$</b>	<b>55,797</b>	<b>17,650,234</b>	<b>17,706,216</b>	<b>110,934</b>

12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
1,041,635	1,321,939	690,110	1,711,795	2,487,993	360,190	1,756,634	2,130,341	1
533,308	533,308	548	646,087	646,635	—	235,134	235,134	2
200,125	200,125	1,426	320,543	321,969	—	115,293	117,958	3
2,901,862	3,120,134	1,240,449	4,757,106	6,015,191	647,439	1,799,866	2,554,151	4
17,386,182	18,065,134	1,066,066	19,704,650	20,977,346	630,329	8,521,363	9,274,698	5
998,012	1,061,716	151,758	1,977,212	2,138,578	46,371	356,648	406,735	6
5,835,636	6,926,845	2,223,571	11,587,594	13,876,312	453,182	2,028,209	2,523,985	7
122,512	123,118	8,372	212,718	221,090	—	85,824	85,824	8
501,636	504,877	75,401	1,158,614	1,234,015	—	289,992	289,992	9
139,551	141,951	6,773	218,035	224,985	1,999	62,118	64,117	10
682,166	707,325	74,496	1,132,888	1,214,750	7,350	281,577	288,927	11
25,273	25,274	269	30,374	31,143	23	5,428	5,451	12
323,559	323,570	24,475	483,477	507,952	844	78,963	79,807	13
688,221	688,221	690	1,669,828	1,670,518	5,510	647,161	667,100	14
1,854,011	1,854,011	8,041	4,690,905	4,698,946	14,760	1,483,834	1,531,563	15
2,914,398	2,914,398	19,098	5,492,046	5,512,044	920	1,231,317	1,232,237	16
194,166	194,166	1,510	390,332	391,842	56	72,482	72,538	17
7,206	7,206	—	20,224	20,224	13	16,828	16,851	18
370,824	370,824	—	980,191	980,191	560	858,608	859,613	19
31,268	31,268	53	79,367	79,420	—	17,144	17,144	20
144,807	144,807	2,170	405,575	407,745	—	69,744	69,744	21
148,805	149,278	—	260,900	260,900	—	60,433	60,433	22
526,133	527,544	—	1,040,554	1,040,554	—	154,114	154,114	23
174,087	176,021	9,289	188,167	197,456	18,982	135,194	154,176	24
901,722	917,207	89,449	1,153,659	1,243,108	84,476	577,644	662,120	25
928,771	938,247	21,584	1,164,192	1,185,776	267,837	474,376	742,213	26
6,556,216	6,674,877	297,317	8,605,139	8,902,463	1,288,213	2,727,087	4,015,300	27
419,843	419,843	—	877,637	877,637	188	249,802	249,990	28
1,168,601	1,168,601	—	2,603,421	2,603,921	382	532,150	532,532	29
246,971	246,971	143	383,500	383,643	1,307	118,408	119,715	30
858,598	858,598	1,452	1,178,474	1,179,926	5,895	288,304	294,199	31
582,264	597,607	60,634	986,338	1,047,069	13,599	447,301	462,868	32
2,979,161	3,116,007	628,478	5,866,282	6,497,410	65,379	2,008,662	2,081,857	33
161,090	182,959	89,060	419,673	508,733	19,113	254,253	273,366	34
912,819	1,076,702	982,085	2,584,206	3,566,291	106,809	1,289,743	1,396,552	35
1,706,789	1,706,789	—	2,058,050	2,058,050	—	1,011,685	1,011,685	36
4,330,586	4,330,586	—	6,052,793	6,052,793	—	1,990,511	1,990,511	37
625,126	625,126	—	562,009	562,009	1,154	326,565	346,886	38
1,515,169	1,515,169	—	1,630,836	1,630,836	2,231	681,914	726,563	39
416,782	417,053	1,308	998,022	999,330	506	213,857	214,450	40
1,135,348	1,137,041	11,846	2,871,516	2,883,362	2,122	487,914	490,199	41
1,069,037	1,069,037	1,721	2,038,791	2,040,512	—	637,877	637,877	42
2,824,277	2,824,277	4,411	5,962,361	5,966,772	—	1,389,573	1,389,573	43
272,222	272,222	—	525,810	525,810	—	89,527	89,527	44
729,927	729,927	—	1,532,521	1,532,521	—	189,212	189,212	45
1,252,973	1,320,626	134,483	2,505,642	2,640,125	15,217	439,633	456,923	46
41,717,551	43,429,365	4,756,252	70,750,358	75,604,655	2,070,889	19,551,392	21,791,664	47
1,442,401	1,709,143	753,657	3,750,261	4,583,053	76,584	805,706	916,094	48
738,353	739,152	2,329	557,121	559,454	3,210	177,932	181,173	49
947,306	1,016,777	100,209	935,245	1,042,733	71,030	784,342	868,286	50
1,942,036	2,050,286	199,366	2,315,480	2,562,029	93,270	1,059,952	1,181,696	51
2,267	2,274	22	1,683	1,706	11	790	806	52
3,811,139	3,831,084	100,325	3,476,163	3,578,938	37,411	1,492,290	1,537,765	53
10,802	10,805	12	5,891	5,907	74	7,092	7,181	54
11,196,327	11,204,461	53,781	8,339,704	8,399,537	392,578	9,062,184	9,501,362	55
12,660,789	12,674,823	30,601	11,729,731	11,760,367	20,694	10,189,926	10,211,791	56
31,786,952	31,897,920	327,577	26,393,320	26,729,697	538,908	21,994,154	22,588,897	57

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

		1919.			
No.	Principal articles by classes.	United Kingdom.	United States.	All Countries.	United Kingdom.
<b>V. Iron and its products—concluded.</b>					
1	Wire—				
	Barbed fence wire of iron or steel..... cwt.	—	241,868	241,868	—
	\$	—	1,080,458	1,080,458	—
2	Wire, curved or not, galvanized iron or steel, Nos. 9, 12, 13 gauge..... cwt.	—	378,827	378,827	—
	\$	—	1,492,975	1,492,975	—
3	Wire rope, stranded or twisted wire..... \$	503,305	430,788	937,024	618,198
4	Wire, steel, valued at not less than 2½c. per lb. for the manufacture of rope..... cwt.	15,790	44,927	60,717	28,642
	\$	140,328	500,738	641,066	300,611
	<b>Total wire..... \$</b>	<b>686,991</b>	<b>4,818,533</b>	<b>5,509,397</b>	<b>956,789</b>
Other iron and steel products—					
5	Axle and axle parts, etc..... \$	3,103	2,023,778	2,026,881	5,977
6	Fittings, iron or steel, for iron or steel pipe \$	112	785,953	786,065	6,338
7	Locomotive and car wheel tires, in the rough..... cwt.	483	191,731	192,214	8,488
	\$	4,869	1,630,778	1,635,647	72,217
8	Manufactures, articles or wares of iron or steel, etc..... \$	149,966	10,914,113	11,107,926	287,734
	<b>Total iron and its products..... \$</b>	<b>6,132,274</b>	<b>185,116,309</b>	<b>192,527,377</b>	<b>6,637,067</b>
<b>VI. Non-ferrous metals and their products.</b>					
Aluminium and its products—					
9	Alumina..... cwt.	—	1,902,296	1,902,296	—
	\$	—	2,296,721	2,296,721	—
10	Aluminium in ingots, blocks, etc..... lb.	118,652	169,719	288,371	201,094
	\$	48,291	66,465	114,756	64,889
11	Aluminium, manufactures of..... \$	407	198,151	202,726	2,695
	<b>Total aluminium and its products \$</b>	<b>48,723</b>	<b>2,732,727</b>	<b>2,836,122</b>	<b>76,467</b>
Brass and its products—					
12	Brass in bars and rods, coils, etc..... cwt.	—	—	—	577
	\$	—	211,735	211,735	11,637
13	Brass, old and scrap..... cwt.	—	11,246	11,536	889
	\$	—	189,646	192,537	18,813
14	Brass in strips, sheets or plates, not polished..... cwt.	—	—	—	41
	\$	135	140,062	140,197	1,388
15	Brass tubing, not polished, etc..... lb.	3,020	581,237	584,257	99,074
	\$	607	238,231	238,838	38,106
16	Wire cloth, or woven wire of brass..... \$	38,855	438,719	477,574	77,307
17	Manufactures of brass, n.o.p..... \$	31,523	2,017,745	2,059,424	89,776
	<b>Total brass and its products..... \$</b>	<b>71,353</b>	<b>4,472,737</b>	<b>4,557,140</b>	<b>242,547</b>
Copper and its products—					
18	Copper, in bars and rods, in coil or otherwise..... cwt.	—	165,926	165,926	—
	\$	—	4,014,210	4,014,210	—
19	Copper, in blocks, pigs or ingots..... lb.	—	3,591,000	3,591,000	—
	\$	—	886,395	886,395	—
20	Copper, in strips, sheets or plates, not polished..... cwt.	—	13,259	13,259	155
	\$	—	404,456	404,456	5,421
21	Copper, tubing in lengths of not less than 6 feet..... lb.	—	446,338	446,338	36,779
	\$	—	188,779	188,779	10,396
22	Copper, all other..... \$	2,991	500,283	503,882	38,033
	<b>Total copper and its products.... \$</b>	<b>2,991</b>	<b>5,994,123</b>	<b>5,997,722</b>	<b>53,855</b>

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
482,892	482,892	—	418,554	418,554	—	166,033	166,133	1
2,056,092	2,056,092	—	1,934,159	1,934,159	—	699,744	700,094	
321,220	321,220	245	366,162	366,407	1	195,137	195,138	2
1,086,257	1,086,257	2,921	1,424,500	1,427,421	13	654,415	654,428	
327,822	946,020	1,000,585	332,996	1,333,712	362,760	75,527	440,004	3
21,439	50,081	54,386	52,337	106,723	19,082	6,245	25,327	4
195,084	495,695	757,257	502,413	1,259,670	182,204	60,200	242,404	
<b>4,886,006</b>	<b>5,843,523</b>	<b>2,021,886</b>	<b>5,981,823</b>	<b>8,018,285</b>	<b>668,122</b>	<b>2,202,577</b>	<b>2,889,392</b>	
3,523,632	3,529,609	332	2,469,298	2,469,630	1,182	1,647,014	1,648,196	5
1,021,290	1,027,268	17,234	1,065,582	1,082,828	20,592	462,632	483,224	
95,090	103,578	73,658	188,638	262,296	88,062	79,607	167,669	7
619,413	691,630	606,137	1,091,120	1,697,257	619,925	395,942	1,015,867	
9,810,907	10,112,138	682,369	12,555,512	13,293,383	553,711	7,092,294	7,706,497	8
<b>78,361,696</b>	<b>186,319,876</b>	<b>16,698,085</b>	<b>226,855,725</b>	<b>245,625,703</b>	<b>8,986,238</b>	<b>99,951,737</b>	<b>110,210,539</b>	
434,572	434,572	—	1,181,313	1,181,313	—	164,561	164,561	9
1,465,372	1,465,372	—	1,675,020	1,675,020	—	520,455	520,455	
1,017,400	1,218,494	239,948	1,409,799	1,650,087	94,499	597,572	692,342	10
297,407	362,296	98,456	468,052	566,944	31,897	133,966	165,923	
283,351	295,859	8,954	330,462	361,227	9,594	246,010	279,243	11
<b>2,630,542</b>	<b>2,747,385</b>	<b>205,801</b>	<b>3,013,971</b>	<b>3,252,236</b>	<b>88,088</b>	<b>1,320,389</b>	<b>1,475,670</b>	
14,380	14,957	4,231	17,341	21,573	1,583	6,477	8,060	12
347,452	359,089	91,811	386,788	478,634	23,364	116,270	139,634	
17,158	18,590	23,685	19,869	44,005	2,905	23,655	26,614	13
204,110	227,317	390,000	270,496	663,468	32,681	111,016	144,142	
14,703	14,744	2,037	11,291	13,334	218	13,126	13,344	14
401,345	402,733	66,574	309,486	376,350	4,846	258,736	263,582	
664,782	763,856	282,363	748,154	1,030,676	32,210	776,545	808,755	15
243,883	281,989	103,524	263,237	366,884	8,411	182,587	190,998	
323,537	400,844	81,569	381,615	489,788	98,204	181,576	289,821	16
2,059,781	2,163,441	229,982	2,473,200	2,735,360	180,654	1,680,100	1,904,052	
<b>4,304,931</b>	<b>4,565,756</b>	<b>979,675</b>	<b>5,055,178</b>	<b>6,098,647</b>	<b>353,260</b>	<b>2,837,520</b>	<b>3,248,229</b>	
296,783	296,783	183	331,707	331,890	30	113,419	113,449	18
6,037,473	6,037,473	7,127	5,716,937	5,724,064	736	1,641,111	1,641,847	
4,866,769	4,866,769	—	7,448,447	7,448,447	—	401,119	401,119	19
1,021,208	1,021,208	—	1,396,327	1,396,327	—	54,138	54,138	
15,425	15,580	129	19,958	20,094	515	16,687	17,202	20
445,921	451,342	4,589	77,535	582,328	11,858	377,893	389,751	
449,561	486,340	158,791	765,517	924,308	22,858	675,781	698,639	21
156,940	167,336	66,264	257,343	323,607	5,762	155,273	161,035	
785,411	890,676	319,660	1,185,054	1,586,200	33,279	479,368	541,288	22
<b>8,446,953</b>	<b>8,568,035</b>	<b>397,640</b>	<b>9,128,864</b>	<b>9,612,526</b>	<b>51,635</b>	<b>2,707,783</b>	<b>2,788,059</b>	



12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

No.	Principal articles by classes.	1919.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
<b>VI. Non-ferrous metals and their products—concluded.</b>					
Lead and its products—					
1	Lead, old, scrap, pig and blocks..... lb.	26	101,664	101,853	1,076,067
	\$	159	689,654	690,464	88,290
2	Manufactures of lead, n.o.p..... \$	8,137	93,797	107,556	23,556
3	Lead, all other..... \$	2,613	148,058	150,671	28,945
	<b>Total lead and its products..... \$</b>	<b>10,909</b>	<b>931,509</b>	<b>948,691</b>	<b>140,791</b>
Nickel, cobalt and their products—					
4	German, Nevada and nickel silver..... \$	1,630	233,144	234,928	6,428
5	Nickel plated ware..... \$	17,520	1,094,998	1,126,008	46,126
	<b>Total nickel, cobalt and their products..... \$</b>	<b>19,150</b>	<b>1,553,649</b>	<b>1,586,442</b>	<b>52,554</b>
6	Precious metals..... \$	42,224	3,523,701	3,593,165	226,869
7	Tin and its products..... \$	1,606,990	208,777	2,153,396	2,116,792
8	Zinc and its products..... \$	363	1,227,073	1,227,436	1,579
9	Clocks and watches..... \$	26,838	1,719,156	2,448,449	27,043
Electric and gas apparatus—					
10	Electric batteries, storage..... No.	—	—	—	181
	\$	—	—	—	4,245
11	Electric dynamos and generators..... \$	—	—	—	4,972
12	Electric light fixtures and parts of..... \$	1,803	267,873	272,776	3,846
13	Electric meters..... \$	—	—	—	37,222
14	Lamps, electric incandescent..... No.	—	—	—	1,479
	\$	—	—	—	18,242
15	Motors, electric, generators and dynamos \$	32,305	2,319,742	2,353,722	177,887
	<b>Total electric and gas apparatus. \$</b>	<b>89,980</b>	<b>10,554,304</b>	<b>10,676,725</b>	<b>177,887</b>
16	Printing materials..... \$	1,225	158,736	160,432	11,665
17	Lamps, side lights, head lights, etc..... \$	8,369	1,367,563	1,829,533	23,112
18	Ores of metals, n.o.p..... cwt.	33	829,063	829,096	1,008
	\$	49,255	970,928	1,089,396	37,767
	<b>Total non-ferrous metals and their products..... \$</b>	<b>2,035,873</b>	<b>37,938,045</b>	<b>41,649,431</b>	<b>3,339,207</b>
<b>VII. Non-metallic minerals and their products.</b>					
Clay and clay products—					
19	Bricks, fire, etc..... \$	120,013	3,314,223	3,434,743	87,476
20	Tableware of china, porcelain, etc..... \$	1,328,307	101,323	1,726,620	1,885,363
	<b>Total clay and clay products..... \$</b>	<b>1,789,629</b>	<b>4,857,998</b>	<b>6,965,251</b>	<b>2,500,680</b>
Coal—					
21	Anthracite coal, grate, egg, stove, etc.... ton	111	4,345,084	4,345,195	—
	\$	949	24,805,609	24,806,558	—
22	Anthracite coal, n.o.p..... ton	—	407,593	407,593	—
	\$	—	1,385,240	1,385,240	—
23	Bituminous coal, slack, etc..... ton	226	3,042,057	3,042,283	—
	\$	330	7,661,765	7,662,095	—
24	Bituminous, coal, round..... ton	290	13,526,452	13,526,742	344
	\$	1,235	36,747,877	36,749,112	2,578
	<b>Total coal..... ton</b>	<b>627</b>	<b>21,321,186</b>	<b>21,321,813</b>	<b>344</b>
	<b>\$</b>	<b>2,514</b>	<b>70,630,491</b>	<b>70,693,905</b>	<b>2,578</b>
25	Coke..... ton	—	1,075,491	1,075,491	—
	\$	—	8,160,916	8,160,916	—
	<b>Total coal and coal products..... \$</b>	<b>2,514</b>	<b>78,937,222</b>	<b>78,939,742</b>	<b>8,452</b>

12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
6,358,075	12,036,032	10,112,820	2,329,580	24,125,960	88,532	587,672	1,431,602	1
372,524	680,778	1,296,777	191,471	1,971,002	58,682	24,278	71,111	2
114,374	172,226	37,724	135,656	244,066	32,773	67,680	139,552	3
135,359	84,307	58,731	50,120	108,851	17,555	9,161	28,362	
542,357	937,312	1,493,232	377,248	2,324,248	89,010	101,110	239,366	
409,407	416,203	38,581	484,618	526,741	12,530	213,035	232,976	4
1,573,248	1,630,047	103,090	1,713,927	1,845,622	96,280	1,139,967	1,287,210	5
2,213,220	2,276,915	141,908	2,455,571	2,629,926	109,964	1,452,919	1,604,328	
5,192,782	5,435,704	665,289	2,056,554	2,758,571	442,215	1,552,188	1,548,870	6
931,422	3,284,609	1,705,894	1,106,291	2,962,644	482,132	721,355	1,244,780	7
892,965	805,530	72,978	457,696	584,474	39,267	287,719	427,660	8
2,134,414	3,126,267	58,713	2,194,558	3,923,528	39,917	1,215,893	2,121,811	9
97,742	97,923	18	89,323	89,341	—	24,797	24,817	10
1,470,479	1,474,724	470	1,363,986	1,364,456	—	82,135	82,135	
1,029,067	1,044,039	93,766	1,227,398	1,323,664	57,711	1,105,441	1,070,717	11
698,879	732,020	6,377	650,548	668,475	8,400	685,473	400,457	12
243,252	280,868	24,620	352,348	376,968	63,694	171,871	288,654	13
1,153,407	1,325,297	52,045	3,372,608	5,047,469	265,691	891,877	5,100,717	14
1,956,639	1,676,703	8,901	870,165	1,184,294	84,207	174,300	570,410	
15,371,461	15,790,354	41,021	2,578,897	2,628,734	216,422	1,500,600	1,750,261	15
277,322	291,676	20,851	391,318	325,661	28,688	200,158	200,222	16
791,145	823,390	56,967	895,333	870,560	25,621	406,433	508,275	17
535,506	537,518	—	42,960	43,105	—	139,982	139,982	18
599,130	663,186	—	176,967	176,989	—	1,313,045	1,313,045	19
46,568,193	52,103,913	6,680,955	45,864,290	55,553,152	2,523,359	25,321,286	29,753,096	20
1,572,565	1,660,336	297,602	2,715,216	3,021,606	152,160	961,281	1,582,484	
113,834	2,528,599	3,531,267	149,674	4,409,183	2,571,026	178,850	2,490,701	
3,307,233	6,371,567	5,067,492	4,505,451	10,781,592	3,517,859	2,471,815	6,778,365	
4,890,795	4,890,795	—	4,360,569	4,360,569	110	4,218,205	4,218,205	21
31,942,384	31,942,384	—	37,576,001	37,576,001	1,056	58,500,678	58,512,800	22
199,974	199,974	—	478,909	478,909	—	166,688	166,688	
705,375	705,375	—	1,482,147	1,482,147	—	487,777	487,777	
2,372,984	2,372,984	309	2,356,758	2,356,157	—	2,748,268	2,748,268	23
5,174,211	5,174,211	2,090	11,293,600	11,305,619	—	7,000,880	7,000,880	
9,179,582	9,179,826	1,082	13,046,086	13,047,839	5,688	9,908,714	10,001,801	24
22,248,081	22,250,659	6,492	60,831,440	60,844,352	56,621	82,103,506	82,204,250	
16,643,333	16,643,677	1,481	20,245,347	20,247,555	5,193	17,162,897	17,168,314	
60,070,051	60,072,629	8,492	111,283,188	111,298,100	31,975	78,224,950	78,358,735	
381,606	381,606	—	548,582	548,582	—	232,174	232,174	25
2,476,450	2,476,450	—	6,247,931	6,247,931	—	1,673,171	1,673,171	
62,793,913	62,802,365	10,446	117,851,412	117,868,258	100,860	80,273,866	80,376,526	

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

		1919.			
No.	Principal articles by classes.	United Kingdom.	United States.	All Countries.	United Kingdom.
<b>VII. Non-metallic minerals and their products—concluded.</b>					
Glass and its products—					
1	Glass balls, and cut, pressed or moulded crystal glass tableware..... \$	10,415	422,748	439,536	16,803
2	Glass carboys or demijohns, bottles..... \$	10,832	644,495	715,769	23,324
3	Plate glass..... \$	69,707	919,961	989,668	56,725
4	Glass, window, common and colourless... \$	5,680	1,504,495	1,514,377	59,893
	<b>Total glass and its products..... \$</b>	<b>191,572</b>	<b>5,013,906</b>	<b>5,364,911</b>	<b>363,568</b>
Petroleum and its products—					
5	Crude petroleum in its natural state..... gal. \$	—	236,809,939	260,819,944	—
	\$	—	13,661,429	14,666,967	—
6	Petroleum imported to be refined..... gal. \$	—	139,635,201	139,635,201	—
	\$	—	7,923,246	7,923,246	—
7	Coal and kerosene, distilled or refined..... gal. \$	—	3,769,926	3,901,449	—
	\$	—	423,166	433,796	—
8	Lubricating oils..... gal. \$	5,926	5,577,972	5,805,893	17,619
	\$	3,365	1,927,225	1,956,262	10,129
9	Gasoline under .725 specific gravity..... gal. \$	—	2,824,542	2,825,812	—
	\$	—	738,802	739,449	—
10	Petroleum, products of, n.o.p..... gal. \$	—	24,647,623	29,882,932	80
	\$	—	5,106,783	5,574,659	98
	<b>Total petroleum, asphalt and their products..... \$</b>	<b>24,699</b>	<b>31,511,604</b>	<b>33,059,779</b>	<b>17,854</b>
11	Stone and stone products..... \$	187,169	3,292,563	3,607,251	143,007
Miscellaneous non-metallic minerals and their Products—					
12	Diamonds, unset..... \$	1,202,890	59	1,250,018	3,012,444
13	Salt for the use of the sea or gulf fisheries.. cwt. \$	700,395	236,625	1,899,062	271,930
	\$	518,072	121,211	755,301	250,504
14	Salt in bulk, n.o.p..... cwt. \$	11,200	1,067,434	1,096,780	7,360
	\$	14,500	298,708	315,145	3,670
15	Salt, n.o.p., in bags, barrels, etc..... cwt. \$	—	266,430	266,430	441,434
	\$	—	152,110	152,110	320,585
16	Sulphur and brimstone, crude..... lb. \$	—	194,464,002	194,634,613	1,120
	\$	—	2,039,980	2,042,172	177
	<b>Total non-metallic minerals and their products..... \$</b>	<b>4,132,824</b>	<b>128,819,978</b>	<b>135,250,417</b>	<b>6,945,566</b>
<b>VIII. Chemicals and allied products.</b>					
17	Acids..... \$	201,130	723,321	975,757	474,767
18	Total drugs, medicine and pharmaceutical preparations..... \$	963,366	1,644,002	3,023,532	1,113,429
19	Total dyeing and tanning materials..... \$	325,068	3,937,236	4,577,074	510,119
Explosives and cellulose products—					
20	Nitro compounds..... \$	104,993	273,903	384,739	157,879
21	Cellulose products..... \$	7,208	934,068	941,516	19,211
	<b>Total explosives and cellulose products..... \$</b>	<b>112,201</b>	<b>1,207,971</b>	<b>1,326,255</b>	<b>177,090</b>
Fertilizers—					
22	Soda, nitrate of, or cubic nitre..... lb. \$	1	49,398,278	84,033,351	—
	\$	1	2,235,371	3,294,369	—
23	Potash muriate and sulphate of, crude.... lb. \$	—	337,657	449,657	1,374,468
	\$	—	46,103	65,423	41,438
24	Other fertilizers compounded or manufactured, n.o.p..... \$	146	984,662	984,808	11,990
	<b>Total fertilizers..... \$</b>	<b>147</b>	<b>3,281,937</b>	<b>4,360,401</b>	<b>54,217</b>
25	Total paints, pigments and varnishes..... \$	111,905	3,301,071	3,422,510	222,210
26	Total soaps..... \$	37,885	1,226,190	1,267,868	92,321
27	Perfumery, cosmetics and toilet preparations..... \$	35,256	294,807	458,874	132,543
	<b>Total soaps, perfumery, cosmetics and other toilet preparations... \$</b>	<b>73,141</b>	<b>1,520,997</b>	<b>1,726,742</b>	<b>224,864</b>
Inorganic chemicals—					
28	Sulphate of alumina or alum cake..... lb. \$	56,000	—	56,000	51,200
	\$	724	—	724	804
29	Ammonia, nitrate of..... lb. \$	—	736,017	738,055	1,102,352
	\$	—	85,507	85,822	66,406

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—con.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
649,129	673,004	42,753	919,585	1,019,744	47,478	431,266	552,859	1
855,916	916,402	32,482	1,495,384	1,584,207	19,424	673,975	738,523	2
751,436	1,150,527	396,638	499,298	2,144,513	310,742	182,255	1,265,506	3
1,621,982	1,891,512	194,374	1,390,708	2,872,151	40,249	28,917	624,386	4
<b>5,914,363</b>	<b>6,926,459</b>	<b>1,030,401</b>	<b>7,140,830</b>	<b>11,083,028</b>	<b>385,806</b>	<b>2,977,268</b>	<b>5,392,534</b>	
136,483,433	298,540,725	—	206,367,754	311,719,057	—	254,948,364	391,292,960	5
12,753,761	15,571,813	—	20,067,907	22,652,012	—	12,960,563	19,610,945	
99,462,361	100,750,725	—	119,044,080	119,044,080	—	51,947,659	51,947,659	6
4,557,231	4,708,921	—	8,257,107	8,257,107	—	2,743,337	2,743,337	
6,880,311	7,648,322	—	16,719,782	16,720,030	700	8,261,791	8,262,611	7
979,312	1,054,487	—	2,578,711	2,578,802	157	451,264	451,473	
4,833,131	5,068,213	16,476	5,110,415	5,126,992	14,117	4,925,550	4,940,282	8
1,760,931	1,706,800	9,234	2,510,277	2,519,610	10,439	1,667,740	1,678,915	
4,979,247	4,982,755	—	9,400,589	9,400,824	—	19,358,013	22,192,721	9
1,287,016	1,288,566	—	2,615,773	2,615,887	—	4,008,254	4,801,664	
27,701,555	32,746,659	86	41,432,890	51,251,309	2,450	1,230,044	1,232,494	10
5,731,766	6,204,840	64	10,073,839	11,016,740	4,424	259,714	264,138	
<b>28,525,941</b>	<b>32,095,285</b>	<b>25,562</b>	<b>47,878,962</b>	<b>51,438,351</b>	<b>32,224</b>	<b>25,958,191</b>	<b>34,242,063</b>	
3,030,761	3,284,176	303,019	4,419,304	4,836,784	180,449	2,545,971	2,934,657	11
55,490	4,470,846	1,385,614	146,109	2,384,150	1,137,654	54,012	3,146,466	12
312,981	1,325,709	245,718	301,133	1,289,617	48,123	423,832	1,037,143	13
192,980	586,318	203,370	152,922	508,841	32,515	164,598	291,036	
991,696	1,005,056	50,640	1,016,187	1,084,595	11,058	876,134	941,968	14
270,632	275,306	36,045	324,940	362,756	7,236	274,784	296,656	
230,386	671,820	451,723	193,293	645,016	509,389	213,096	722,485	15
153,967	474,552	353,981	148,621	500,632	335,164	50,868	486,032	
158,350,597	158,351,717	1,041	237,787,380	237,809,435	8,290	157,168,316	157,198,236	16
1,296,281	1,296,458	133	1,729,093	1,729,808	211	1,271,397	1,272,170	
<b>108,525,324</b>	<b>121,953,176</b>	<b>9,118,403</b>	<b>188,459,045</b>	<b>206,095,113</b>	<b>6,324,790</b>	<b>118,233,478</b>	<b>137,604,140</b>	
534,117	1,054,345	404,358	459,690	892,197	96,760	300,646	494,889	17
1,805,801	3,402,932	1,307,077	1,679,047	3,457,913	752,233	1,843,858	2,477,473	18
4,664,391	5,623,720	818,241	4,447,808	6,031,566	253,526	2,898,444	4,093,392	19
375,965	556,836	296,040	430,178	750,385	26,880	147,142	201,184	20
1,101,181	1,122,057	41,725	1,370,429	1,420,374	55,832	994,246	1,076,384	21
<b>1,477,146</b>	<b>1,678,893</b>	<b>337,765</b>	<b>1,800,607</b>	<b>2,170,759</b>	<b>82,712</b>	<b>1,141,388</b>	<b>1,277,568</b>	
9,923,005	9,923,605	32,892	49,212,429	52,579,803	5,877	22,832,331	22,838,208	22
389,890	389,909	2,510	1,634,822	1,737,622	288	581,619	581,907	
2,855,156	6,897,319	589,678	4,210,616	18,314,748	558,670	5,140,223	8,667,354	23
170,815	285,131	35,970	166,756	840,323	22,002	152,619	241,679	
734,641	748,382	2,770	1,181,898	1,187,481	18,484	539,664	509,129	24
<b>1,624,442</b>	<b>1,753,307</b>	<b>172,056</b>	<b>3,503,303</b>	<b>4,427,564</b>	<b>40,964</b>	<b>1,674,461</b>	<b>1,887,384</b>	
3,541,145	3,821,880	509,128	3,513,581	4,251,620	440,894	1,926,621	2,838,466	25
1,424,181	1,534,082	103,883	1,244,677	1,424,446	73,704	1,044,852	1,211,553	26
528,854	1,096,104	94,487	470,763	1,202,585	63,577	441,363	955,259	27
<b>1,953,035</b>	<b>2,639,180</b>	<b>198,370</b>	<b>1,715,440</b>	<b>2,627,031</b>	<b>137,281</b>	<b>1,486,215</b>	<b>2,166,542</b>	
20,742,765	20,793,965	455,530	20,923,453	21,378,983	385,544	16,047,073	16,432,750	28
325,946	326,650	9,504	353,842	363,346	6,217	275,352	281,574	
1,481,025	3,066,879	2,707	661,757	1,981,806	—	1,144,332	2,017,078	29
82,215	184,396	404	34,390	142,999	—	61,986	127,484	



**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—concluded.**

Fiscal years 1919-1922.—concluded.		1919.			
No.	Principal articles by classes.	United Kingdom.	United States.	All Countries.	United Kingdom.
<b>VIII. Chemicals and allied products—concluded.</b>					
<b>Inorganic chemicals—concluded.</b>					
1	Sal ammoniac..... lb.	209,846	484,009	693,855	774,282
	\$	23,853	67,382	91,235	85,199
2	Copper, sulphate of (blue vitriol)..... lb.	—	2,526,418	2,526,718	518,616
	\$	—	220,482	220,607	49,436
3	Chloride of lime, etc..... lb.	—	11,958,547	11,958,547	194,450
	\$	—	174,362	174,362	5,509
4	Cream of tartar in crystals or argols..... lb.	43,040	322,896	473,703	182,503
	\$	22,845	180,183	261,653	72,414
5	Borax in bulk..... lb.	2,240	2,309,525	2,311,765	6,890
	\$	292	180,800	181,092	589
6	Soda ash or barilla..... lb.	14,861,757	71,398,304	86,260,061	1,030,102
	\$	230,889	1,685,034	1,915,923	19,274
7	Soda, bicarbonate of..... lb.	1,561,847	5,547,213	7,109,060	3,371,055
	\$	27,746	123,026	150,772	67,542
8	Soda, caustic..... lb.	224,428	11,155,053	11,379,483	—
	\$	15,087	507,037	522,124	—
9	Soda, sal..... lb.	27,139	10,644,763	10,671,902	—
	\$	575	170,771	171,346	—
10	Soda, sulphate of, crude, known as salt cake lb.	32,890,788	34,726,974	67,617,762	2,478,750
	\$	216,068	410,378	626,446	40,609
11	Soda, silicate of, in crystals or solution... lb.	1,017,725	24,452,390	25,470,115	543,980
	\$	21,857	265,504	287,361	14,763
12	Acid phosphate, not medicinal..... lb.	—	3,102,469	3,102,469	24,239
	\$	—	307,891	307,891	2,593
	<b>Total inorganic chemicals..... \$</b>	<b>738,720</b>	<b>5,776,498</b>	<b>6,582,532</b>	<b>574,649</b>
<b>Other chemicals, n.o.p.—</b>					
13	Camphor..... lb.	19,107	15,317	69,925	10,475
	\$	27,441	19,068	91,646	25,384
14	Cyanide of potassium..... lb.	1,197,468	393,969	1,591,437	634,082
	\$	324,108	100,020	424,128	157,794
15	Ink, printing..... \$	13,658	143,631	157,571	15,734
16	Polish or composition, knife or other..... \$	37,034	236,329	273,381	97,633
	<b>Total chemicals and allied products \$</b>	<b>3,397,055</b>	<b>28,719,765</b>	<b>34,282,647</b>	<b>4,154,345</b>
<b>IX. All other commodities.</b>					
<b>Amusement and sporting goods—</b>					
17	Cinematograph or moving picture films, positives..... \$	22,143	924,511	947,033	55,441
18	Toys, all kinds..... \$	28,208	708,489	972,137	76,686
	<b>Total amusement and sporting goods..... \$</b>	<b>55,880</b>	<b>1,722,573</b>	<b>2,017,134</b>	<b>150,680</b>
<b>Total household and personal equipment..... \$</b>					
19	Brushes..... \$	32,974	377,098	606,771	61,544
20	Packages..... \$	613,065	652,594	1,455,277	981,272
<b>Household and Personal equipment—</b>					
21	Boot, shoe, shirt and stay laces..... \$	5,000	227,005	314,278	57,907
22	Boots, shoes, slippers, etc..... \$	50,681	215,428	300,364	71,470
23	Buttons, all kinds..... \$	20,167	807,927	1,037,025	22,501
24	Jewellery..... \$	13,198	724,833	750,771	50,030
25	Pencils, lead..... \$	6,570	477,316	497,927	13,832
26	Pocket books, portfolios, etc..... \$	8,936	440,105	465,474	46,026
27	Spectacle frames, eye-glass frames..... \$	74	161,197	161,275	15
28	Tobacco pipes, all kinds, etc..... \$	174,186	481,457	754,757	489,341
29	Braids, cords, fringes, tassels..... \$	23,889	319,695	358,736	53,102
	<b>Total household and personal equipment..... \$</b>	<b>783,842</b>	<b>4,983,627</b>	<b>6,692,672</b>	<b>991,181</b>
<b>Total all other commodities..... \$</b>					
30	Musical instruments..... \$	26,455	3,012,920	3,164,227	52,436
31	Scientific and educational equipment..... \$	70,239	2,146,047	2,280,782	153,503
32	Ships and vessels..... \$	861	3,850,361	3,881,424	694,123
33	Vehicles, chiefly of wood..... \$	424	703,168	704,497	1,339
34	Works of art..... \$	13,978	195,992	217,593	265,134
35	Miscellaneous articles imported under special conditions..... \$	3,995,379	54,007,956	58,537,936	1,860,161
	<b>Total all other commodities..... \$</b>	<b>6,436,160</b>	<b>94,168,170</b>	<b>103,399,992</b>	<b>8,323,784</b>
	<b>Total imports merchandise..... \$</b>	<b>73,035,118</b>	<b>750,203,024</b>	<b>919,711,705</b>	<b>126,362,631</b>

**12.—Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1919-1922.—concluded.**

1920.		1921.			1922.			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
455,484	1,229,791	1,127,095	299,942	1,438,231	458,331	389,291	854,671	1
48,511	133,720	137,901	34,496	173,105	38,698	30,783	71,637	2
1,872,562	2,391,178	573,638	1,780,164	2,353,802	678,996	833,740	1,512,738	3
147,730	197,166	49,492	124,307	173,799	39,427	56,651	96,079	4
20,248,575	20,443,025	720,461	38,729,921	39,450,426	456,022	17,625,186	18,090,172	5
363,228	368,737	47,374	1,176,515	1,223,901	14,976	384,621	399,860	6
289,498	796,799	123,632	236,337	525,583	189,611	185,298	358,104	7
138,307	370,375	65,044	116,403	293,120	52,479	50,755	216,945	8
3,618,074	3,624,964	65,314	2,604,536	2,669,855	82,751	2,142,430	2,225,181	9
278,292	278,881	6,256	212,544	218,801	5,739	126,570	132,306	10
50,896,211	52,016,313	67,982	12,145,267	12,213,249	689,740	6,032,891	6,811,850	11
1,055,810	1,075,084	1,766	314,347	316,013	16,120	110,679	130,972	12
4,102,093	7,473,148	4,218,504	3,999,229	8,217,738	261,921	6,007,867	6,269,788	13
96,656	164,198	92,649	107,655	200,304	9,630	137,811	147,441	14
6,097,654	6,097,654	11,016	8,155,035	8,313,151	982,778	12,952,191	13,937,519	15
224,888	224,888	442	337,060	344,045	40,853	501,653	542,845	16
10,619,962	10,619,962	11,200	9,223,189	9,238,262	171,695	9,604,796	9,776,491	17
158,059	158,059	170	185,610	186,098	4,939	195,936	200,875	18
51,441,315	53,920,065	630,198	84,302,106	86,052,304	10,056	57,909,851	57,919,907	19
369,033	409,642	7,730	1,019,445	1,043,175	134	696,837	696,971	20
21,206,340	21,750,320	987,983	27,539,839	28,797,822	577,216	22,381,917	23,071,973	21
234,204	249,057	29,035	314,587	346,758	16,610	235,500	253,658	22
3,176,843	3,201,082	54,939	2,931,194	2,986,133	83,867	3,395,316	3,479,183	23
334,660	337,253	4,909	313,280	318,189	8,262	253,923	262,185	24
<b>5,052,525</b>	<b>5,832,751</b>	<b>869,754</b>	<b>6,113,013</b>	<b>7,244,920</b>	<b>489,761</b>	<b>4,635,451</b>	<b>5,369,678</b>	
49,514	67,130	1,594	57,128	60,984	2,627	50,404	61,667	25
138,894	184,213	4,757	93,329	101,668	2,481	44,962	54,216	26
269,524	903,606	977,208	237,881	1,215,089	1,590,759	67,877	1,725,964	27
65,559	223,353	240,575	59,565	300,140	349,583	16,918	380,607	28
181,913	197,752	20,163	196,111	217,546	18,871	144,497	168,337	29
273,056	371,165	141,706	282,986	425,098	77,501	146,261	225,040	30
<b>23,854,300</b>	<b>29,886,102</b>	<b>6,048,717</b>	<b>26,776,364</b>	<b>36,334,612</b>	<b>3,238,465</b>	<b>17,688,482</b>	<b>24,041,885</b>	
1,311,691	1,367,132	29,581	1,629,424	1,660,892	29,640	1,716,161	1,754,285	31
1,038,844	1,296,454	367,494	1,177,606	1,935,202	161,124	906,045	1,376,084	32
<b>2,616,836</b>	<b>3,077,476</b>	<b>455,646</b>	<b>3,046,654</b>	<b>4,112,324</b>	<b>237,588</b>	<b>2,858,381</b>	<b>3,535,160</b>	
474,528	767,183	171,669	504,221	1,077,718	104,505	316,319	607,100	33
800,757	2,124,532	1,763,773	966,683	3,432,883	1,005,143	630,330	2,050,153	34
247,833	370,665	98,318	188,246	355,629	19,405	84,704	122,916	35
328,941	434,262	206,406	285,877	524,555	46,035	171,632	243,922	36
1,099,983	1,329,092	62,839	832,545	1,213,064	40,057	524,140	690,382	37
1,120,530	1,242,010	203,392	811,858	1,174,102	91,057	663,877	880,205	38
559,804	582,495	68,256	793,686	873,967	48,922	661,400	721,846	39
652,991	746,245	179,766	509,784	754,326	134,397	450,185	652,796	40
170,410	170,712	420	211,102	211,553	113	114,876	115,011	41
486,651	1,204,889	977,221	350,946	1,661,023	823,039	133,180	1,322,322	42
410,745	515,788	123,806	455,171	792,688	63,591	554,465	819,971	43
<b>8,477,622</b>	<b>8,269,220</b>	<b>2,282,246</b>	<b>5,793,461</b>	<b>9,416,005</b>	<b>1,547,923</b>	<b>4,382,579</b>	<b>6,981,560</b>	
4,122,624	4,329,093	131,465	3,096,608	3,486,744	74,883	2,040,439	2,353,531	44
3,029,921	3,282,803	299,259	3,211,916	3,765,608	262,074	2,721,148	3,405,251	45
5,495,478	6,191,136	599,739	2,411,450	3,034,247	236,836	600,591	849,958	46
731,260	732,682	3,599	951,256	964,880	2,918	518,324	521,283	47
314,813	621,520	337,306	435,903	875,350	231,681	186,436	540,280	48
10,447,734	12,843,580	7,506,391	11,509,450	19,494,853	5,195,273	7,558,378	13,501,708	49
<b>50,653,209</b>	<b>62,344,780</b>	<b>17,061,864</b>	<b>50,159,028</b>	<b>72,688,072</b>	<b>11,470,236</b>	<b>34,365,251</b>	<b>50,485,971</b>	
<b>801,097,318</b>	<b>1,064,528,123</b>	<b>213,973,562</b>	<b>853,176,820</b>	<b>1,240,158,882</b>	<b>117,134,576</b>	<b>516,105,107</b>	<b>747,804,332</b>	

**13.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce by Main Classes, during the fiscal years ended March 31, 1917-21.**

Classes.	1917.	1918.	1919.	1920.	1921.
<b>Imports.</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Vegetable Products (except chemicals, fibres and wood).</b>					
Dutiable.....	73,962,399	84,233,176	84,619,145	156,821,370	184,814,030
Free.....	51,908,269	64,725,712	72,887,509	85,254,019	76,267,334
<b>Total.....</b>	<b>125,870,651</b>	<b>148,958,888</b>	<b>157,506,654</b>	<b>242,075,389</b>	<b>261,081,364</b>
<b>Animals and their Products (except chemicals and fibres).</b>					
Dutiable.....	45,153,434	41,054,713	24,554,327	52,933,661	36,407,665
Free.....	18,681,088	19,515,452	16,950,767	42,165,082	25,314,725
<b>Total.....</b>	<b>63,834,522</b>	<b>60,570,165</b>	<b>41,505,094</b>	<b>95,098,743</b>	<b>61,722,390</b>
<b>Fibres, Textiles and Textile Products.</b>					
Dutiable.....	102,352,276	94,540,642	105,186,945	156,536,642	171,058,642
Free.....	40,515,762	57,770,640	73,003,296	75,023,234	72,549,700
<b>Total.....</b>	<b>142,868,038</b>	<b>152,311,282</b>	<b>178,190,241</b>	<b>231,559,877</b>	<b>243,608,342</b>
<b>Wood, Wood Products and Paper.</b>					
Dutiable.....	14,448,912	15,901,269	18,610,573	24,837,227	33,969,792
Free.....	9,482,353	12,569,446	16,789,279	18,346,040	23,479,592
<b>Total.....</b>	<b>23,931,265</b>	<b>28,470,715</b>	<b>35,399,852</b>	<b>43,183,267</b>	<b>57,449,384</b>
<b>Iron and its Products.</b>					
Dutiable.....	129,867,974	160,678,802	136,580,414	155,244,390	202,323,458
Free.....	23,383,405	34,569,911	55,946,963	31,075,486	43,302,245
<b>Total.....</b>	<b>153,251,379</b>	<b>195,248,713</b>	<b>192,527,377</b>	<b>186,319,876</b>	<b>245,625,703</b>
<b>Non-Ferrous Metals and their Products.</b>					
Dutiable.....	17,990,469	24,857,388	22,779,305	32,781,310	39,923,514
Free.....	21,473,741	21,345,665	18,870,126	19,322,603	15,630,388
<b>Total.....</b>	<b>39,464,210</b>	<b>46,203,053</b>	<b>41,649,431</b>	<b>52,103,913</b>	<b>55,553,902</b>
<b>Non-Metallic Minerals and their Products (except Chemicals).</b>					
Dutiable.....	42,192,419	81,317,323	89,202,250	61,395,487	122,636,171
Free.....	37,035,126	48,471,181	46,048,167	60,560,689	83,458,942
<b>Total.....</b>	<b>79,227,545</b>	<b>129,788,504</b>	<b>135,250,417</b>	<b>121,956,176</b>	<b>206,095,113</b>
<b>Chemicals and Allied Products.</b>					
Dutiable.....	12,683,981	13,924,935	17,847,452	17,894,483	19,992,459
Free.....	15,989,017	13,915,641	16,435,195	11,991,619	16,342,153
<b>Total.....</b>	<b>28,672,998</b>	<b>27,840,576</b>	<b>34,282,647</b>	<b>29,886,102</b>	<b>36,334,612</b>
<b>All other Commodities.</b>					
Dutiable.....	23,081,745	25,833,274	27,114,247	35,210,594	36,435,675
Free.....	166,248,508	148,307,408	76,285,745	27,134,186	36,252,397
<b>Total.....</b>	<b>189,330,253</b>	<b>174,140,682</b>	<b>103,399,992</b>	<b>62,344,780</b>	<b>72,688,072</b>
<b>Total Imports.</b>					
Dutiable.....	461,733,609	542,341,522	526,494,658	693,655,165	847,561,406
Free.....	384,717,269	421,191,056	393,217,047	370,872,958	392,597,476
<b>Total.....</b>	<b>846,450,878</b>	<b>963,532,578</b>	<b>919,711,705</b>	<b>1,064,528,123</b>	<b>1,240,158,882</b>
<b>Duty collected (Includes War Tax)</b>	<b>147,631,455</b>	<b>161,595,629</b>	<b>158,046,334</b>	<b>187,524,182</b>	<b>179,667,683</b>

13.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, during the fiscal years ended March 31, 1917-21—concluded.

Classes.	1917.	1918.	1919.	1920.	1921.
<b>Exports.</b>	\$	£	\$	\$	\$
Vegetable Products (except Chemicals, Fibres & Wood)					
Canadian Produce.....	386,011,190	587,431,967	288,893,218	416,122,771	482,924,672
Foreign Produce.....	8,508,153	14,582,388	25,722,684	6,421,943	1,518,545
<b>Total.....</b>	<b>394,519,343</b>	<b>602,014,355</b>	<b>314,615,902</b>	<b>422,544,714</b>	<b>484,443,217</b>
Animals and their Products (ex- cept Chemicals & Fibres)..					
Canadian Produce.....	157,577,393	209,496,712	244,990,826	314,017,944	188,359,937
Foreign Produce.....	8,114,872	7,717,075	9,364,079	6,565,660	1,433,501
<b>Total.....</b>	<b>165,692,265</b>	<b>217,213,787</b>	<b>254,354,905</b>	<b>320,583,604</b>	<b>189,793,438</b>
Fibres, Textiles and Textile Products					
Canadian Produce.....	11,979,554	30,804,815	28,030,381	34,028,314	18,783,884
Foreign Produce.....	560,477	1,184,031	1,834,594	3,923,765	2,626,801
<b>Total.....</b>	<b>12,540,031</b>	<b>31,988,846</b>	<b>29,864,975</b>	<b>37,952,079</b>	<b>21,410,685</b>
Wood, Wood Products and Paper.					
Canadian Produce.....	103,652,217	116,354,814	154,569,154	213,913,944	284,561,478
Foreign Produce.....	743,318	349,076	308,949	535,319	551,189
<b>Total.....</b>	<b>104,395,535</b>	<b>116,733,890</b>	<b>154,878,103</b>	<b>214,449,263</b>	<b>285,112,667</b>
Iron and its Products.					
Canadian Produce.....	63,310,063	64,837,223	81,910,926	81,785,829	76,500,741
Foreign Produce.....	5,645,309	9,591,213	6,179,760	18,058,937	8,582,412
<b>Total.....</b>	<b>68,955,372</b>	<b>74,428,436</b>	<b>88,090,686</b>	<b>99,844,766</b>	<b>85,083,153</b>
Non-Ferrous Metals and their Products.					
Canadian Produce.....	90,263,731	89,523,168	79,260,732	54,976,413	45,939,377
Foreign Produce.....	231,082	740,501	967,146	2,597,839	846,500
<b>Total.....</b>	<b>90,494,793</b>	<b>90,263,669</b>	<b>80,227,878</b>	<b>57,574,252</b>	<b>46,785,877</b>
Non-Metallic Minerals and their Products (except chemicals)					
Canadian Produce.....	14,842,774	19,984,236	26,662,304	30,342,926	40,121,892
Foreign Produce.....	549,503	2,002,797	3,207,941	842,930	888,775
<b>Total.....</b>	<b>15,392,277</b>	<b>21,987,033</b>	<b>29,870,245</b>	<b>31,185,856</b>	<b>41,010,667</b>
Chemicals and Allied Products.					
Canadian Products.....	52,592,935	49,131,084	56,799,799	22,581,049	19,582,051
Foreign Products.....	606,623	721,164	1,331,193	3,556,274	1,111,680
<b>Total.....</b>	<b>53,199,558</b>	<b>49,852,248</b>	<b>58,130,992</b>	<b>26,137,323</b>	<b>20,693,731</b>
All other Commodities.					
Canadian Produce.....	271,145,911	372,433,769	255,326,466	71,722,908	32,389,669
Foreign Produce.....	2,576,105	9,253,759	3,405,133	4,663,944	3,405,015
<b>Total.....</b>	<b>273,721,926</b>	<b>381,687,528</b>	<b>258,731,599</b>	<b>76,386,852</b>	<b>35,794,684</b>
Total Exports.					
Canadian Produce.....	1,151,375,768	1,540,027,788	1,216,443,806	1,239,492,098	1,189,163,701
Foreign Produce.....	27,835,332	46,142,004	52,321,479	47,166,611	21,264,418
<b>Total.....</b>	<b>1,179,211,100</b>	<b>1,586,169,792</b>	<b>1,268,765,285</b>	<b>1,286,658,709</b>	<b>1,210,428,119</b>
Total Trade.					
Imports merchandise.....	846,450,878	963,532,578	919,711,705	1,064,528,123	1,240,158,882
Exports merchandise.....	1,179,211,100	1,586,169,792	1,268,765,285	1,286,658,709	1,210,428,119
<b>Total.....</b>	<b>2,025,661,978</b>	<b>2,549,702,370</b>	<b>2,188,476,990</b>	<b>2,351,186,832</b>	<b>2,450,587,001</b>



**14.—External Trade of Canada, by Main Groups and Degrees of Manufacture according to Origin, Year ended March 31, 1921.**

Origin.	Imports for Consumption.			Exports, Domestic.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	\$	\$	\$	\$	\$	\$
<b>Articles of Agricultural or Vegetable Origin—</b>						
Raw materials.....	4,379,179	95,746,927	116,027,670	102,977,914	119,701,522	377,953,496
Partly manufactured articles.....	1,323,715	27,867,830	86,073,222	42,385	353,213	1,712,774
Fully or chiefly manufactured articles.....	84,691,774	73,857,849	197,703,006	39,678,411	30,065,190	110,242,257
<b>Total.....</b>	<b>99,394,668</b>	<b>197,472,606</b>	<b>399,803,898</b>	<b>142,698,710</b>	<b>150,119,925</b>	<b>489,908,527</b>
<b>Articles of Animal Origin</b>						
Raw materials.....	2,995,807	24,035,345	34,964,629	9,748,983	52,319,728	64,849,426
Partly manufactured articles.....	14,158,423	9,847,749	25,798,508	2,463,779	2,813,024	6,103,807
Fully or chiefly manufactured articles.....	45,632,846	29,539,331	95,827,070	71,817,483	7,699,844	92,024,869
<b>Total.....</b>	<b>62,787,076</b>	<b>63,422,425</b>	<b>156,590,207</b>	<b>84,030,245</b>	<b>62,832,596</b>	<b>162,978,102</b>
<b>Articles of Marine Origin</b>						
Raw materials.....	24,825	918,972	1,321,991	63,545	9,638,854	9,739,501
Partly manufactured articles.....	—	—	—	20,962	841,422	867,923
Fully or chiefly manufactured articles.....	179,238	347,625	2,976,001	7,618,878	5,299,197	23,055,327
<b>Total.....</b>	<b>204,063</b>	<b>1,266,597</b>	<b>4,297,992</b>	<b>7,703,385</b>	<b>15,779,473</b>	<b>33,662,751</b>
<b>Articles of Forest Origin</b>						
Raw materials.....	24,704	1,883,243	1,941,464	400,792	23,827,367	24,298,362
Partly manufactured articles.....	21,582	20,450,218	20,514,217	31,482,313	105,612,392	150,884,447
Fully or chiefly manufactured articles.....	3,224,246	31,434,293	37,091,922	5,083,447	87,336,466	110,420,307
<b>Total.....</b>	<b>3,270,532</b>	<b>53,767,754</b>	<b>59,547,603</b>	<b>36,966,552</b>	<b>216,776,225</b>	<b>285,603,116</b>
<b>Articles of Mineral Origin—</b>						
Raw materials.....	370,007	150,313,792	154,403,559	4,889,869	31,672,077	48,926,839
Partly manufactured articles.....	4,548,624	11,164,099	16,367,055	10,093,082	21,536,700	36,443,731
Fully or chiefly manufactured articles.....	30,418,760	315,661,268	357,244,112	16,576,941	26,785,613	88,340,996
<b>Total.....</b>	<b>35,337,391</b>	<b>477,139,159</b>	<b>528,014,726</b>	<b>31,559,892</b>	<b>79,994,390</b>	<b>173,711,566</b>
<b>Articles of Mixed Origin—</b>						
Raw materials.....	—	—	—	—	—	—
Partly manufactured articles.....	1,768,689	2,079,243	4,312,117	276,406	669,859	951,135
Fully or chiefly manufactured articles.....	20,211,143	61,029,036	87,592,339	9,609,681	16,150,499	42,348,504
<b>Total.....</b>	<b>21,979,832</b>	<b>63,108,279</b>	<b>91,904,456</b>	<b>9,886,087</b>	<b>16,820,358</b>	<b>43,299,639</b>
<b>SUMMARY.</b>						
Raw materials.....	7,794,522	272,898,279	308,659,313	118,081,103	237,159,548	525,767,624
Partly manufactured articles.....	21,821,033	71,409,139	153,065,119	44,378,927	131,826,610	196,963,817
Fully or chiefly manufactured articles.....	184,358,007	511,869,402	778,434,450	150,384,841	173,336,809	466,432,269
<b>Grand total.....</b>	<b>213,973,562</b>	<b>856,176,820</b>	<b>1,240,158,882</b>	<b>312,844,871</b>	<b>542,322,967</b>	<b>1,189,163,70</b>
Approximate values of Principal Canadian Exports produced wholly or chiefly from Imported materials, included in above statement:—						

**14.—External Trade of Canada, by Main Groups and Degrees of Manufacture according to Origin, Year ended March 31, 1921.—concluded.**

Origin.	Imports for Consumption.			Exports, Domestic.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
<b>Articles of Agricultural or Vegetable Origin—</b>	\$	\$		\$	\$	\$
Raw materials.....	—	—	—	11,895	22,523	223,732
Partly manufactured articles.....	—	—	—	—	349,573	355,173
Fully or chiefly manufactured articles.....	—	—	—	5,494,262	13,789,472	29,103,066
<b>Total.....</b>	—	—	—	<b>5,506,157</b>	<b>14,161,568</b>	<b>29,681,971</b>
<b>Articles of Animal Origin</b>						
Fully or chiefly manufactured articles.....	—	—	—	158,710	23,543	343,077

**15.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, Fiscal Year ended March 31, 1921.**

Classes.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
	\$	\$	\$	\$	\$	\$
<b>FOOD, DRINK AND TOBACCO.</b>						
Beverages and infusions.....	28,046,955	2,485,702	49,477,313	375,560	79,092	2,694,751
Beverages, alcoholic.....	23,211,493	1,764,558	34,653,630	375,560	64,768	2,672,920
Brewed.....	127,387	15,919	143,737	86	125	912,964
Distilled.....	22,856,969	1,663,196	32,224,707	374,662	18,417	1,700,617
Fermented.....	227,137	85,443	2,285,186	812	46,226	59,339
Cider.....	2,902	4,420	7,423	—	46,175	52,565
Wines.....	224,235	81,023	2,277,763	812	51	6,774
Non-sparkling.....	129,265	79,996	1,652,568	812	51	6,774
Sparkling.....	94,970	1,027	625,195	—	—	—
Beverages, non-alcoholic.....	76,386	168,007	364,764	—	12,785	16,480
Lime and other fruit juices.....	50,699	109,591	178,331	—	—	—
Mineral and aerated waters.....	25,687	58,416	191,433	—	12,785	16,480
Infusions.....	4,759,076	553,137	14,453,919	—	1,539	5,351
Cocoa and chocolate.....	411,031	76,735	500,634	—	—	—
Coffee and chicory.....	461,663	390,718	4,284,500	—	1,539	5,351
Tea.....	3,886,382	85,684	9,668,785	—	—	—
Black.....	3,851,218	64,401	8,259,079	—	—	—
Green.....	35,164	21,283	1,409,706	—	—	—
Foods.....	5,244,686	96,783,761	181,113,126	219,115,632	189,705,317	612,929,170
Animals for food.....	7,320	308,097	315,430	19,350	23,719,386	23,977,107
Breadstuffs.....	193,712	16,902,849	19,984,402	125,399,280	110,746,455	416,208,242
Grains.....	23,904	15,248,445	17,931,183	93,224,170	98,635,857	344,317,521
Flour and other milled products.....	41,355	1,267,122	1,504,213	31,102,264	12,060,358	70,597,375
Flour and meal.....	5,107	621,219	682,317	31,062,517	12,060,358	69,247,174
Other milled products.....	36,248	645,903	821,896	39,747	—	1,350,201
Bakery products and prepared foods.....	128,393	387,282	549,006	1,072,846	50,240	1,293,346
Cocoa and chocolate.....	151,921	908,361	1,770,713	—	—	—
Fish.....	181,604	974,630	3,672,488	7,679,338	15,235,173	33,078,718
Fresh.....	4,499	682,850	974,827	60,460	9,351,133	9,440,223
Canned.....	62,551	123,070	916,016	7,596,747	2,859,477	13,637,568
Dried, smoked, salted.....	114,554	168,710	1,781,645	22,131	3,024,563	10,000,927
Fruits.....	505,899	27,821,667	31,677,311	8,612,490	1,198,118	10,320,878
Fresh.....	136,606	18,452,055	18,947,769	7,909,477	1,102,498	9,246,581
Dried.....	81,081	7,262,490	9,270,241	188,774	21,055	322,777
Otherwise prepared.....	288,212	2,107,122	3,459,301	514,239	74,565	751,520
Meats.....	368,495	10,128,794	11,428,483	33,162,064	8,998,102	44,501,520
Fresh.....	2,829	5,009,386	5,771,871	1,350,850	8,263,571	11,037,169
Cured, pickled or prepared.....	365,666	5,119,408	5,656,612	31,811,214	734,531	33,464,351
Lard.....	70,271	2,299,889	2,370,160	205,414	526	674,429

**15.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, Fiscal Year ended March 31, 1921.—con.**

Classes.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
	\$	\$	\$	\$	\$	\$
<b>FOOD, DRINK AND TOBACCO—concluded.</b>						
Food—concluded.						
Milk and its products.....	80,110	1,639,517	2,683,217	38,686,253	8,094,530	52,863,867
Milk and cream, fresh.....	—	45,973	45,973	—	2,400,377	2,400,377
Milk products and preparations.....	80,110	1,593,544	2,637,244	38,686,253	5,694,153	50,463,490
Nuts.....	343,546	2,129,665	4,889,294	4,330	4,298	9,123
Cocoanuts and their products.....	111,212	87,491	562,975	—	—	—
Other nuts, not shelled.....	47,869	991,632	1,467,250	4,330	4,298	9,123
Other nuts, shelled.....	184,465	1,050,542	2,859,069	—	—	—
Salt.....	593,396	624,483	1,372,199	—	655	7,982
Spices.....	598,832	318,167	1,158,067	—	—	—
Sugar and sugar products.....	1,395,383	21,479,853	86,070,230	684,014	12,135,768	15,136,525
Confectionery.....	325,963	396,796	802,230	419,623	57,524	1,190,718
Molasses and syrups.....	93,405	341,190	6,716,273	955	95,879	102,398
Sugar.....	972,724	20,471,605	78,278,334	247,161	9,999,566	11,837,930
Miscellaneous.....	3,291	270,262	275,393	16,275	1,982,799	2,005,479
Vegetables.....	377,615	5,331,769	6,521,956	274,403	9,078,427	10,841,366
Fresh.....	111,415	4,563,463	4,890,550	363	8,982,151	10,373,416
Dried and canned.....	1,616	639,370	1,131,255	274,040	96,276	467,950
Pickles and sauces.....	264,584	128,936	500,148	—	—	—
Vinegar.....	29,208	16,082	50,030	—	21,721	25,220
Yeast.....	—	465,421	465,453	—	—	—
Other food products.....	347,374	5,434,517	6,683,693	4,388,696	472,158	5,284,193
Tobacco and smokers' supplies.....	1,630,663	962,814	3,170,575	26,127	9,875	72,987
Tobacco.....	652,347	401,775	1,273,001	26,127	9,875	72,987
Smokers' supplies.....	978,316	561,039	1,897,574	—	—	—
<b>PERSONAL AND HOUSEHOLD UTILITIES.</b>						
Books, printed matter, stationery and educational supplies.....	2,460,377	13,108,360	16,444,594	488,092	693,042	2,531,640
Books, pamphlets, printed matter and maps.....	1,562,334	9,336,371	11,531,160	184,225	551,302	930,940
Books.....	1,312,177	3,377,160	5,298,413	55,048	226,423	308,175
Newspapers.....	43,705	2,625,669	2,672,629	—	—	—
Maps and charts.....	15,010	81,460	97,666	129,177	324,879	622,765
Printed matter, n.o.p.....	191,442	3,252,082	3,462,452	—	—	—
Stationery.....	335,127	1,654,368	2,020,929	177,396	22,747	1,294,730
Educational equipment (except text books).....	79,773	593,530	749,806	105,552	34,546	199,587
Works of art.....	492,143	1,524,091	2,142,699	20,919	84,447	106,383
Clothing.....	12,791,987	13,155,534	28,422,709	2,430,733	656,687	8,633,525
Blouses and shirtwaists.....	54,305	154,459	226,726	—	—	—
Boots and shoes.....	596,346	2,351,786	2,993,731	1,361,639	278,699	2,966,307
Gloves and mitts.....	877,408	187,992	1,599,983	24,084	6,568	99,459
Handkerchiefs.....	1,798,614	115,962	2,313,043	—	—	—
Hats and caps.....	1,208,197	2,252,804	4,057,388	2,353	7,774	130,438
Hosiery.....	3,040,149	1,264,482	4,333,044	—	—	—
Shawls.....	261,216	18,931	290,250	—	—	—
Shirts.....	281,363	529,672	847,786	—	—	—
Underwear.....	511,640	472,459	1,088,398	—	—	—
Miscellaneous clothing.....	4,162,749	5,806,987	10,672,360	1,042,657	363,646	5,437,321
Household equipment and supplies.....	17,536,958	14,413,033	35,106,517	952,193	321,334	3,938,647
Bedding.....	1,712,977	661,779	2,382,300	—	—	—
Cutlery.....	453,888	535,649	1,022,234	—	—	—
Floor coverings.....	2,957,817	456,533	3,725,627	—	28	47,169
Wool carpets.....	2,102,583	270,205	2,597,408	—	—	—
Other coverings.....	855,234	186,328	1,128,219	—	28	47,169
Furniture.....	127,407	2,115,314	2,384,357	312,807	60,506	919,211
Glassware and pottery.....	4,086,978	1,382,827	6,397,944	4,678	5,343	65,250
Glassware.....	42,753	919,585	1,019,744	—	—	—
China and pottery.....	4,044,225	463,242	5,378,200	4,678	5,343	65,250
Household linen.....	5,711,881	639,979	6,662,607	—	—	—
Household machinery.....	146,822	1,826,044	1,972,566	299,636	103,513	1,092,067
Kitchen equipment.....	99,627	1,638,609	1,755,449	26,662	106,268	264,307

15.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, Fiscal Year ended March 31, 1921—con.

Classes.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
<b>PERSONAL AND HOUSEHOLD UTILITIES—Concluded.</b>	\$	\$	\$	\$	\$	\$
Household Soap.....	103,318	1,240,023	1,419,227	24,260	2,474	143,627
Toilet articles, n.o.p.....	340,154	1,095,845	2,493,547	1,767	12	5,907
Window curtains and fixtures.....	487,831	252,936	836,371	-	-	-
Miscellaneous household equipment.....	1,308,758	2,567,495	4,053,988	282,383	43,190	1,401,109
Jewellery, personal ornaments and timepieces.....	1,967,482	3,495,718	8,608,493	140,393	20,832	282,690
Jewellery and personal ornaments.....	1,907,769	1,391,165	4,684,970	140,393	20,832	282,690
Timepieces.....	59,713	2,104,553	3,923,523	-	-	-
Recreation equipment and supplies.....	648,461	6,283,611	7,793,145	421,915	2,529,404	3,543,651
Musical instruments and supplies.....	136,113	3,145,549	3,520,700	334,475	118,557	951,326
Picture machines and supplies.....	35,368	1,753,220	1,800,667	54,871	2,378,524	2,493,694
Equipment for indoor games.....	16,416	71,898	107,021	-	-	-
Miscellaneous amusement supplies.....	460,564	1,312,944	2,364,757	32,569	32,323	98,631
<b>PRODUCERS, EQUIPMENT.</b>						
Abrasives.....	120,661	1,877,980	2,004,389	16,424	1,901,681	1,946,601
Containers, wrapping and packing materials.....	3,016,563	9,367,149	13,711,429	993,367	301,275	4,154,916
Bags or sacks.....	194,138	1,297,783	1,560,071	16,693	48,238	215,319
Barrels.....	3,975	335,305	341,270	200	45,661	52,934
Cordage.....	718,153	350,496	1,087,463	9,858	26,022	185,924
Wrapping paper.....	45,011	818,045	900,488	966,616	165,291	3,672,780
Miscellaneous.....	2,055,286	6,565,520	9,822,137	-	16,063	27,959
Farm equipment.....	620,957	29,651,875	30,965,774	1,319,910	6,086,951	15,714,199
Agricultural implements.....	135,440	9,612,246	9,930,105	1,183,076	3,439,149	12,527,373
Dairying machinery.....	101,557	721,652	992,404	2,635	78,675	157,208
Planting and tillage implements.....	526	3,372,514	3,373,144	477,587	1,343,494	4,920,996
Harvesting equipment.....	11,518	1,294,916	1,314,295	390,610	622,112	4,204,944
Seed separation machinery.....	505	2,642,960	2,643,465	4,038	804,648	818,052
Other agricultural implements.....	21,037	562,610	588,906	175,200	194,056	1,058,993
Parts of agricultural implements.....	297	1,017,594	1,017,891	133,006	396,164	1,367,180
Animals (except animals for food).....	389,858	1,029,452	1,419,517	15,600	1,727,847	1,906,556
Animals for improvement of stock.....	378,556	711,085	1,089,641	450	750,261	773,907
Animals, other.....	11,302	318,367	329,876	15,150	977,586	1,132,649
Engines for farm purposes.....	6,276	14,472,641	14,478,917	-	-	-
Fencing.....	7,717	3,428,281	3,435,998	117,108	707,181	1,013,752
Harness and horse equipment.....	46,509	159,494	206,390	3,564	119,423	144,786
Plants, trees and shrubs.....	32,721	299,066	841,691	412	88,971	97,074
Vehicles, chiefly for farm use.....	2,436	600,781	603,242	150	4,380	24,658
Miscellaneous farm equipment.....	-	49,914	49,914	-	-	-
Industrial equipment.....	6,226,092	48,248,813	55,983,374	1,552,742	2,332,750	6,237,676
Fishermen's equipment.....	1,484,450	1,439,463	3,019,512	-	50,874	51,285
Industrial and trade machinery (except boilers, engines and mining machinery).....	3,847,705	34,281,612	37,947,272	1,009,461	1,946,514	4,536,982
Office or business machinery.....	3,046	2,273,741	2,278,967	274,987	10,779	729,227
Metal working machinery.....	211,226	1,932,502	2,144,056	-	-	-



**15.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, Fiscal Year ended March, 31, 1921—con.**

Classes.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
<b>PRODUCERS' EQUIPMENT—concluded.</b>	\$	\$	\$	\$	\$	\$
Industrial, paper and pulp-mill machinery.....	690,110	1,711,795	2,487,993	—	—	—
Textile machinery.....	1,245,989	4,932,506	6,179,562	—	—	—
Other machinery.....	1,197,334	23,431,068	24,836,694	734,474	1,935,735	3,807,755
Mining and metallurgical equipment.....	86,273	1,559,761	1,651,754	—	—	—
Printing equipment.....	36,662	1,032,618	1,080,079	11,794	13,143	40,649
Photographic equipment.....	29,233	2,253,516	3,284,091	215,558	771	244,223
Tools, n.o.p.....	199,366	2,315,480	2,562,029	143,139	75,863	538,967
Transmission equipment.....	391,592	1,243,397	1,642,518	—	8,877	88,733
Miscellaneous industrial equipment.....	650,811	4,122,966	4,796,119	172,790	236,708	736,837
Light, heat and power equipment and supplies.....	1,203,331	153,251,865	154,786,824	1,571,230	11,333,626	23,503,291
Boilers and engines (except for farms).....	511,961	3,112,479	3,624,560	120,434	48,490	262,775
Electric apparatus.....	589,053	17,193,513	18,038,445	373,093	158,725	1,248,172
Batteries.....	490	1,428,687	1,429,239	4,517	10,540	39,293
Dynamos and motors.....	134,787	3,806,205	3,952,398	13,255	67,608	93,572
Other.....	453,776	11,958,621	12,656,808	355,321	80,577	1,115,307
Fuel.....	8,624	128,559,050	128,574,870	941,299	6,932,096	17,209,287
Coal.....	8,492	111,283,188	111,298,100	941,299	6,287,861	16,501,478
Fuel oils.....	—	10,902,080	10,902,194	—	61,290	109,547
Other fuel.....	132	6,373,782	6,374,576	—	592,945	598,262
Illuminants.....	6,546	2,858,003	2,865,049	110,390	4,187,063	4,715,150
Other light, heat and power equipment.....	87,147	1,528,820	1,683,900	26,014	7,252	67,907
Lubricating oils and greases.....	13,699	2,927,597	2,941,395	—	—	—
<b>PRODUCERS' MATERIALS.</b>						
Building and construction materials.....	2,602,909	38,618,292	44,278,517	28,030,418	67,596,125	111,249,269
Asphalt and its products.....	275	694,898	695,854	—	—	—
Brick and tile.....	452,089	3,336,039	3,824,811	—	232,374	256,223
Cement, lime and plaster.....	41,751	231,178	273,026	197	1,721,393	2,740,878
Glass for building.....	754,570	2,025,101	5,341,986	—	—	—
Iron, structural.....	47,544	10,473,324	10,526,868	—	172,015	424,165
Iron piping.....	66,142	2,690,927	2,763,081	345,553	137,224	3,106,170
Nails.....	2,769	250,960	254,201	2,045,843	1,014,522	4,548,642
Lumber and timber.....	26,047	10,220,674	10,274,465	21,317,750	58,347,387	86,704,209
Paints and painters' materials.....	769,596	3,401,391	4,431,539	934,409	154,055	1,756,045
Paints and varnishes.....	211,179	615,166	839,460	915,455	82,735	1,655,441
Painters' materials.....	558,417	2,786,225	3,592,079	18,954	71,320	100,604
Stone, marble and slate.....	66,627	973,843	1,056,075	5,265	92,024	102,797
Railway materials.....	—	3,076,710	3,076,710	1,303,196	2,992,294	5,721,568
Miscellaneous construction materials.....	375,499	1,237,247	1,759,901	2,078,705	2,732,837	5,888,572
Farm materials.....	424,067	13,385,790	14,892,117	1,640,134	14,312,812	17,403,573
Fertilizers.....	147,744	2,485,015	2,647,077	—	3,531,059	3,538,075
Fodders.....	1,470	1,899,630	1,902,547	323,848	6,551,667	8,062,256
Seeds.....	242,854	3,436,683	4,729,177	1,088,347	1,305,888	2,611,068
Miscellaneous farm materials.....	31,999	5,564,462	5,613,316	227,939	2,924,198	3,192,174
Manufacturers' materials.....	109,298,654	291,974,495	450,128,640	36,184,088	223,695,917	296,294,317
For explosives and ammunition.....	72,610	641,477	714,087	—	—	—
For textiles and clothing.....	84,373,942	77,448,113	189,860,777	1,144,669	2,981,869	8,682,607
Fibres for spinning or cordage manufacture.....	7,212,725	39,637,886	48,498,612	635,719	2,498,750	3,466,585
Yarn for weaving.....	14,849,333	4,309,026	19,970,388	—	—	—
Piece goods for clothing.....	55,752,754	22,632,821	98,379,275	217,908	412,801	4,248,653
Thread for sewing.....	1,853,004	1,395,908	3,321,977	—	—	—
Buttons and button materials.....	55,295	760,008	1,165,971	1,966	3,320	25,204
Corset materials.....	105,031	503,861	609,431	—	—	—
Hat materials.....	396,223	2,174,428	3,804,202	—	—	—
Other textile and clothing materials.....	4,149,577	6,034,175	14,110,921	289,076	66,998	942,165
For dyeing and tanning.....	818,241	4,462,381	6,046,139	31,300	37,212	70,967
For fur and leather goods manufacture.....	2,087,196	14,404,994	23,699,999	5,679,218	14,679,592	21,788,240

15.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, Fiscal Year ended March 31, 1921—concluded.

Classes.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
<b>PRODUCERS' MATERIALS—concluded.</b>	\$	\$	\$	\$	\$	\$
For fur and leather goods manufacture—con.						
Furs.....	411,776	4,079,443	5,834,373	3,220,415	7,971,562	11,899,276
Hides.....	492,734	4,436,340	10,652,737	17,874	4,726,941	4,750,536
Leather.....	1,166,748	5,056,393	6,356,952	2,440,929	1,981,089	5,138,428
Other materials.....	15,938	832,818	855,937	—	—	—
For smelters and metal refineries.....	240,575	7,110,413	8,386,163	2,554,671	22,438,954	25,070,427
For foundries.....	2,715,204	8,443,807	11,653,815	4,114,791	4,388,805	9,441,881
For manufacture of machinery, implements, tools and cutlery.....	2,395,343	19,253,309	21,715,047	22,095	86,076	137,988
For manufacture of electrical goods.....	887	1,008,167	1,010,532	—	—	—
For manufacture of furniture and woodenware....	40,837	7,159,955	7,246,243	997,220	295,289	2,160,322
For manufacture of musical instruments.....	297,390	579,653	1,006,853	—	—	—
For paper-making, paper goods, printing and book binding.....	1,232,901	9,474,993	10,770,044	8,699,149	128,005,646	152,736,357
For rubber-working industries.....	2,563,619	3,927,933	10,982,313	—	133,316	133,516
For vehicles and vessels...	1,590,923	14,713,538	16,212,110	—	8,320	32,132
For vehicles.....	608,574	9,842,746	10,451,320	—	—	—
For vessels.....	982,349	4,870,792	5,760,790	—	8,320	32,132
Other materials for chemical-using industries.....	1,523,436	10,242,927	12,811,253	655,685	709,205	3,152,268
Other materials for metal-working industries.....	5,752,638	53,396,055	59,423,671	9,019,264	8,623,142	23,725,887
Other manufacturers' materials.....	3,592,912	59,706,780	68,589,594	3,266,026	41,308,491	49,161,725
<b>TRANSPORTATION AND COMMUNICATION.</b>						
Telegraph and telephone equipment (except bare wire).....	73,476	1,248,748	1,326,269	—	485,842	488,512
Vehicles and vessels.....	624,953	30,725,718	31,470,194	11,446,225	5,233,164	48,956,077
Vehicles (except farm vehicles).....	361,139	29,625,717	30,081,528	6,585,407	3,473,042	31,606,942
Automobiles.....	184,707	23,545,598	23,738,842	2,152,029	2,911,229	18,241,446
Motor cycles, bicycles, etc.....	109,953	637,626	747,772	29,225	4,253	235,622
Rubber tires.....	31,007	2,193,992	2,310,941	3,641,720	179,133	8,253,986
Railway rolling stock....	34,309	2,888,026	2,922,335	726,952	46,447	4,425,933
Locomotives.....	14,249	982,384	996,633	726,952	27,960	3,472,594
Railway cars.....	20,060	1,905,642	1,925,702	—	18,487	953,339
Vehicles, n.o.p.....	1,163	360,475	361,638	35,481	331,980	449,955
Vessels.....	263,814	1,100,001	1,388,666	4,860,818	1,760,122	17,349,135
Ships and boats.....	7,227	984,947	1,015,232	4,860,818	1,760,122	17,349,135
Equipment for ships and boats.....	256,587	115,054	373,434	—	—	—
<b>MEDICAL SUPPLIES.</b>						
Alkaloids and their salts....	374,809	160,964	551,268	—	—	—
Biological medicines.....	10,166	297,556	356,664	—	—	—
Drugs, crude.....	9,314	280,752	363,061	28,070	320,395	355,362
Medicinal and pharmaceutical preparations.....	1,004,412	1,604,860	3,066,172	555,804	28,330	972,083
Oils, chiefly for medicinal use	209,848	181,573	541,627	—	82,073	87,427
Medical and dental equipment	201,456	2,071,867	2,363,659	—	—	—
<b>ARMS, EXPLOSIVES AND WAR STORES.</b>						
Arms.....	46,292	643,776	734,333	26,674	3,869	31,207
Military equipment.....	187,417	18,311	228,918	—	—	—
Ammunition and explosives.	323,848	907,118	1,262,262	11,949	628,473	1,324,376
<b>GOODS FOR EXHIBITION.</b>						
Animals.....	973	1,330,691	1,331,664	—	—	—
Other goods.....	14,174	735,583	758,715	—	—	—

**16.—Values of Exports (domestic and foreign) to the British and Foreign West Indies, by Countries, during the fiscal years 1920-1922.**

Countries.	1920.		1921.		1922.	
	Exports, domestic.	Exports, foreign.	Exports, domestic.	Exports, foreign.	Exports, domestic.	Exports, foreign.
	\$	\$	\$	\$	\$	\$
British Guiana.....	3,109,381	12,628	3,594,118	13,275	2,298,105	26,349
British West Indies.....	10,869,276	94,991	13,030,225	104,583	9,976,969	166,163
<b>Total, British West Indies.....</b>	<b>13,978,657</b>	<b>107,619</b>	<b>16,624,343</b>	<b>117,858</b>	<b>12,275,074</b>	<b>192,512</b>
Cuba.....	6,329,783	528,878	6,573,768	636	3,974,432	13,670
American Virgin Islands <sup>1</sup> ....	2,256	15	1,131	972	2,275	12
French West Indies....	470,934	1,930	140,589	4,125	66,082	22
Dutch West Indies.....	42,569	40	44,508	-	45,433	49
Dutch Guiana.....	131,905	82	135,427	460	127,509	38
French Guiana.....	14,686	-	1,474	-	841	-
Hayti.....	174,543	-	95,135	-	71,967	-
Porto Rico.....	1,489,667	401	1,315,716	3,750	1,301,979	-
Santo Domingo.....	169,186	100,000	247,436	141	64,497	-
<b>Total, Foreign West Indies.....</b>	<b>8,825,529</b>	<b>631,346</b>	<b>8,555,184</b>	<b>10,084</b>	<b>5,655,015</b>	<b>13,791</b>
<b>Total Exports to the British and Foreign West Indies.....</b>	<b>22,804,186</b>	<b>738,965</b>	<b>25,179,527</b>	<b>127,942</b>	<b>17,930,089</b>	<b>206,303</b>

<sup>1</sup>Formerly Danish West Indies.

**17.—Values of Imports entered for home consumption (dutiable and free) from the British and Foreign West Indies, by Countries, during the fiscal years 1920-1922.**

Countries.	1920.		1921.		1922.	
	Imports, dutiable.	Imports, free.	Imports, dutiable.	Imports, free.	Imports, dutiable	Imports, free.
	\$	\$	\$	\$	\$	\$
British Guiana.....	7,047,053	365,878	8,678,971	406,137	6,150,199	16,465
British West Indies.....	7,350,219	4,764,751	7,901,396	5,399,882	5,874,863	2,238,590
<b>Total, British West Indies.....</b>	<b>14,397,272</b>	<b>5,130,449</b>	<b>16,580,367</b>	<b>5,806,019</b>	<b>12,025,062</b>	<b>2,255,055</b>
Cuba.....	16,764,341	821,187	29,971,455	771,784	12,323,872	718,696
Dutch Guiana.....	87,943	-	-	-	-	-
Hayti.....	174,472	-	156,056	-	42,050	-
Porto Rico.....	180	1,730	52	500	5	100
Santo Domingo.....	10,675,287	-	7,578,738	56	4,065,870	40
<b>Total, Foreign West Indies.....</b>	<b>27,702,223</b>	<b>822,917</b>	<b>37,706,301</b>	<b>772,340</b>	<b>16,431,797</b>	<b>718,836</b>
<b>Total Imports from the British and Foreign West Indies.....</b>	<b>42,099,495</b>	<b>5,953,366</b>	<b>54,286,668</b>	<b>6,578,359</b>	<b>28,456,859</b>	<b>2,973,891</b>

## 18.—Value of Imports and Exports from and to British and Foreign West Indies, 1901-1922.

Fiscal Year.	IMPORTS FROM			EXPORTS (DOMESTIC AND FOREIGN) TO		
	British West Indies and British Guiana.	Foreign West Indies and Foreign Guiana.	Total.	British West Indies and British Guiana.	Foreign West Indies and Foreign Guiana.	Total.
	\$	\$	\$	\$	\$	\$
1901.....	1,406,480	594,768	2,001,248	2,297,804	984,306	3,282,110
1902.....	1,702,293	539,697	2,241,990	2,456,132	1,339,408	3,795,540
1903.....	2,415,608	596,970	3,012,578	2,699,167	1,471,843	4,171,010
1904.....	7,006,892	667,232	7,674,124	2,662,524	1,423,542	4,086,066
1905.....	8,539,656	714,339	9,303,995	2,872,770	1,460,801	4,333,571
1906.....	7,521,360	657,081	8,178,441	2,847,381	1,831,656	4,679,037
1907 <sup>1</sup> .....	5,208,892	524,599	5,733,491	2,188,542	1,497,240	3,685,782
1908.....	9,293,804	525,026	9,818,830	3,090,468	2,096,502	5,186,970
1909.....	9,088,596	605,260	9,693,856	3,054,073	2,006,362	5,060,435
1910.....	9,004,421	1,815,110	10,819,531	3,697,872	2,384,296	6,082,168
1911.....	10,262,613	2,062,006	12,324,619	4,736,005	2,501,599	7,237,604
1912.....	10,550,491	2,891,199	13,441,690	4,617,961	2,925,246	7,543,207
1913.....	9,443,393	4,941,127	14,384,520	4,591,105	2,327,508	6,918,613
1914.....	8,045,844	7,600,817	15,646,661	5,142,605	2,554,591	7,697,196
1915 <sup>2</sup> .....	9,155,872	5,112,932	14,268,804	5,045,589	2,095,009	7,140,598
1916 <sup>2</sup> .....	11,895,387	5,991,612	17,886,999	5,346,805	2,319,286	7,666,091
1917 <sup>2</sup> .....	21,431,898	4,509,658	25,941,556	6,818,553	4,085,227	10,903,780
1918 <sup>2</sup> .....	17,267,197	7,905,117	25,172,314	8,886,796	5,129,505	14,016,301
1919 <sup>2</sup> .....	15,184,897	7,980,671	23,165,568	12,958,822	6,503,851	19,462,673
1920 <sup>2</sup> .....	19,527,721	28,525,140	48,052,861	14,086,276	9,456,875	23,543,151
1921 <sup>2</sup> .....	22,386,386	38,478,641	60,865,027	16,742,201	8,565,268	25,307,469
1922 <sup>2</sup> .....	14,280,117	17,150,633	31,430,750	12,467,586	5,668,806	18,136,392

<sup>1</sup>Nine months.    <sup>2</sup>Imports for home consumption.

NOTE.—Foreign West Indies include Cuba, Danish, Dutch and French West Indies, Dutch and French Guiana, Hayti, Porto Rico and Santo Domingo. The Danish West Indies are now the American Virgin Islands.

## 19.—Imports of certain Articles of Raw Material for home consumption, 1902-1922.

Fiscal Year.	Rags, all kinds.	Broom corn. <sup>1</sup>	Hides, horns, pelts, etc. <sup>1</sup>	Sugar, raw.	Tobacco, raw.
	Cwt.	\$	\$	Ton.	Lib.
1902.....	367,373	202,487	5,086,052	159,348	11,329,674
1903.....	241,286	165,231	5,662,744	180,849	13,380,504
1904.....	254,484	197,982	4,916,222	183,405	14,248,303
1905.....	1,116,215	175,412	5,240,717	163,717	13,859,152
1906.....	1,697,801	196,804	6,811,267	210,215	14,519,658
1907 (9 months).....	156,102	167,654	5,843,511	142,334	14,347,476
1908.....	323,453	238,512	4,908,871	217,281	15,690,076
1909.....	256,617	246,701	5,218,108	226,712	15,994,878
1910.....	496,057	432,146	8,237,014	231,152	13,753,141
1911.....	536,604	389,173	8,105,330	271,532	17,204,271
1912.....	564,296	437,001	8,903,727	281,402	17,203,513
1913.....	750,003	377,462	13,486,459	310,101	22,153,588
1914.....	716,882	324,590	8,831,010	347,168	17,598,449
1915.....	540,922	285,574	12,842,558	335,820	18,595,957
1916.....	510,472	337,688	12,441,731	298,433	20,834,672
1917.....	780,062	449,137	12,863,893	365,772	17,702,637
1918.....	505,643	851,933	8,794,289	382,807	17,824,947
1919.....	570,211	1,119,700	5,426,008	359,470	25,103,080
1920.....	352,413	840,180	22,654,661	540,787	24,345,295
1921.....	316,315	511,222	10,652,787	347,594	20,007,411
1922.....	216,915	327,114	5,898,087	432,212	20,870,509

<sup>1</sup>Value only; the Trade and Navigation Returns do not give quantities.



**19. Imports of certain Articles of Raw Materials for home consumption,  
1902-1922—concluded.**

Fiscal Year.	Cotton wool or raw cot- ton and waste.	Hemp, undressed.	Wool, raw.	Gutta per- cha, India- rubber, etc., crude.
	Cwt.	Cwt.	Cwt.	Cwt.
1902.....	693,578	160,794	103,607	29,104
1903.....	735,760	129,856	79,947	28,615
1904.....	557,765	123,885	73,394	32,134
1905.....	636,594	102,529	76,172	28,103
1906.....	675,495	123,857	63,118	24,916
1907 (9 months).....	662,548	75,037	39,228	20,021
1908.....	522,552	145,969	61,292	25,562
1909.....	653,160 <sup>1</sup>	69,553 <sup>2</sup>	56,839	20,391
1910.....	680,835 <sup>1</sup>	58,911 <sup>2</sup>	74,271	35,555
1911.....	812,622 <sup>1</sup>	81,017 <sup>2</sup>	64,224	28,035
1912.....	727,039 <sup>1</sup>	82,661 <sup>2</sup>	71,954	44,313
1913.....	774,578 <sup>1</sup>	64,990 <sup>2</sup>	92,092	56,655
1914.....	769,930 <sup>1</sup>	55,572 <sup>2</sup>	72,521	44,504
1915.....	730,325 <sup>1</sup>	55,370 <sup>2</sup>	131,940	65,045
1916.....	969,679 <sup>1</sup>	50,914 <sup>2</sup>	211,407	99,132
1917.....	877,634 <sup>1</sup>	15,846 <sup>2</sup>	145,812	107,580
1918.....	880,374 <sup>1</sup>	45,177 <sup>2</sup>	115,380	130,956
1919.....	1,117,235 <sup>1</sup>	72,887 <sup>2</sup>	158,767	192,272
1920.....	964,715 <sup>1</sup>	46,553 <sup>2</sup>	117,717	244,335
1921.....	986,315 <sup>1</sup>	47,090 <sup>2</sup>	92,772	228,062
1922.....	953,860 <sup>1</sup>	77,833 <sup>2</sup>	125,867	189,525

<sup>1</sup>Cotton waste included with rags, all kinds.    <sup>2</sup>Includes dressed hemp.

**20.—Value of Total Exports and Imports entered for Consumption, and the duty  
collected thereon, at certain Ports during the fiscal years ended March 31  
1920 and 1921.**

Ports.	1920.			1921.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	\$	\$	\$	\$	\$	\$
<b>P. E. Island.</b>						
<b>All Ports.....</b>	<b>326,442</b>	<b>1,014,875</b>	<b>150,260</b>	<b>593,013</b>	<b>1,248,526</b>	<b>198,203</b>
Nova Scotia.						
Halifax.....	54,562,947	20,532,135	3,504,205	36,669,918	24,749,731	3,221,249
Sydney.....	7,940,561	4,264,167	397,047	13,980,514	4,234,634	255,026
Other ports.....	15,526,430	8,261,120	1,042,551	14,933,538	9,839,036	856,094
<b>Total.....</b>	<b>78,029,938</b>	<b>33,057,422</b>	<b>4,943,803</b>	<b>65,583,970</b>	<b>38,823,401</b>	<b>4,373,169</b>
New Brunswick.						
McAdam Jct.....	19,227,123	84,363	19,065	22,657,021	211,589	44,763
St. John.....	114,257,976	26,990,916	5,308,915	81,440,495	32,857,033	4,358,176
Other ports.....	8,388,957	6,794,669	837,482	9,649,237	8,870,938	974,490
<b>Total.....</b>	<b>141,874,056</b>	<b>33,869,948</b>	<b>6,156,462</b>	<b>113,746,753</b>	<b>41,939,560</b>	<b>5,377,429</b>
Quebec.						
Abercorn.....	20,195,094	254,789	40,874	17,697,251	243,604	37,235
Atholstan.....	18,795,927	2,466,429	132,434	14,686,692	2,755,353	154,597
Beebe Jct.....	12,832,243	2,256,864	270,477	14,033,709	2,154,278	200,055
Coaticook.....	85,981,041	573,618	66,191	56,436,691	686,559	41,805
Montreal.....	353,138,249	246,898,636	47,921,848	263,743,335	286,597,463	47,102,591
Quebec.....	22,464,945	19,951,075	3,053,788	28,799,768	26,663,862	4,772,664
St. Armand.....	6,534,527	226,248	19,408	7,947,356	456,872	17,107
St. Johns.....	63,077,966	8,642,758	869,402	56,362,267	10,869,485	931,338
Three Rivers.....	599,318	5,322,954	550,568	389,297	5,928,938	506,003
Other ports.....	4,009,032	22,401,991	2,684,463	6,382,682	26,138,744	2,390,733
<b>Total.....</b>	<b>587,928,342</b>	<b>308,995,362</b>	<b>55,609,453</b>	<b>466,479,045</b>	<b>362,495,148</b>	<b>56,154,821</b>

**20.—Value of Total Exports and Imports entered for Consumption, and the duty collected thereon, at certain Ports during the fiscal years ended March 31, 1920 and 1921—concluded.**

Ports.	1920			1921		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	\$	\$	\$	\$	\$	\$
<b>Ontario.</b>						
Brantford.....	—	7,224,511	916,243	—	9,169,163	960,541
Bridgeburg.....	82,534,720	3,143,461	696,229	59,624,694	4,528,855	693,309
Cornwall.....	15,075,513	3,219,626	327,496	15,659,654	3,574,330	208,299
Fort Frances.....	12,204,744	1,311,721	284,139	33,828,907	2,699,133	465,158
Fort William.....	12,554,135	8,976,515	874,332	89,470,594	12,407,513	863,270
Hamilton.....	983,399	41,903,064	6,114,470	807,244	53,268,905	6,506,816
Kitchener.....	—	12,676,829	1,602,128	—	11,552,575	1,350,557
London.....	—	12,479,261	1,896,482	—	14,494,177	1,905,464
Niagara Falls.....	66 056 865	7 619,311	1,551,074	54,457,525	10,951,302	1,857,865
Oshawa.....	—	15,285,246	4,859,727	—	10,336,576	2,672,806
Ottawa.....	7,669	18,755,041	2,632,206	—	18,675,313	2,307,204
Port Arthur.....	7,721,640	5,374,715	444,810	46,879,487	6,742,719	397,091
Prescott.....	14,239,694	1,984,293	304,252	19,380,244	3,318,562	353,791
St. Catharines.....	253,971	7,845,764	1,281,864	322,891	12,173,096	1,157,358
Sarnia.....	31,309,051	15,256,836	1,004,296	36,827,289	23,798,307	1,166,403
Sault Ste. Marie.....	15,736,589	6,748,293	969,831	18,029,970	11,431,532	1,177,407
Toronto.....	2,595,510	235,437,854	42,949,765	1,737,255	242,909,733	38,626,922
Trenton.....	—	400,138	50,475	—	587,739	58,789
Welland.....	—	10,497,130	910,845	—	12,365,676	743,459
Windsor.....	48,372,433	36,985,626	10,663,617	47,565,159	41,714,789	8,774,954
Other ports.....	2,922,537	76,184,769	10,231,552	5,057,351	96,036,969	10,280,234
<b>Total.....</b>	<b>312,568,470</b>	<b>529,310,004</b>	<b>90,565,833</b>	<b>429,648,264</b>	<b>602,737,014</b>	<b>82,632,697</b>
<b>Manitoba.</b>						
Emerson.....	32,723,305	1,648,222	144,636	22,977,401	1,983,088	157,094
Winnipeg.....	406,591	50,397,062	11,565,330	141,069	58,886,539	10,792,181
Other ports.....	1,442,733	3,244,704	443,341	2,304,012	3,953,855	446,053
<b>Total.....</b>	<b>34,572,629</b>	<b>55,289,988</b>	<b>12,153,307</b>	<b>25,422,482</b>	<b>64,823,482</b>	<b>11,395,328</b>
<b>Saskatchewan.</b>						
North Portal.....	30,004,295	708,057	42,534	21,649,314	1,118,567	72,150
Regina.....	355,170	7,742,491	1,274,544	197,202	11,986,552	2,187,000
Other ports.....	493,383	8,167,859	1,379,953	607,035	8,611,773	1,219,686
<b>Total.....</b>	<b>30,852,848</b>	<b>10,618,407</b>	<b>2,697,031</b>	<b>22,453,551</b>	<b>21,716,892</b>	<b>3,478,836</b>
<b>Alberta.</b>						
Calgary.....	—	8,939,763	1,847,583	—	11,074,988	2,039,225
Other ports.....	2,209,910	9,943,962	1,785,919	1,265,682	13,152,324	2,107,766
<b>Total.....</b>	<b>2,209,910</b>	<b>18,883,725</b>	<b>3,633,502</b>	<b>1,265,682</b>	<b>24,227,312</b>	<b>4,146,991</b>
<b>British Columbia.</b>						
Nanaimo.....	10,833,594	1,253,670	236,381	11,848,107	1,467,125	242,813
New Westminster.....	11,049,759	1,524,085	243,207	8,925,109	1,601,771	194,415
Vancouver.....	39,535,283	49,256,913	9,202,941	50,049,502	64,731,912	9,558,083
Victoria.....	22,286,473	10,540,004	1,181,902	3,533,538	8,585,309	1,202,808
Other ports.....	14,200,204	4,538,651	678,676	10,675,223	5,139,171	742,885
<b>Total.....</b>	<b>97,905,313</b>	<b>67,108,323</b>	<b>11,543,104</b>	<b>85,031,479</b>	<b>81,615,288</b>	<b>11,941,004</b>
<b>Yukon District.</b>						
<b>All ports.....</b>	<b>390,761</b>	<b>368,115</b>	<b>58,881</b>	<b>204,204</b>	<b>498,423</b>	<b>59,927</b>
Prepaid postal parcels duty received through P. O. Department.....	—	11,954	3,546	—	33,826	9,278
<b>Grand Total.....</b>	<b>1,268,658,709</b>	<b>1,064,528,123</b>	<b>187,524,182</b>	<b>1,210,428,119</b>	<b>1,240,158,882</b>	<b>179,667,683</b>

NOTE.—The values given in this table of imports and exports at the leading ports of entry indicate that merchandise of the value stated was entered inwards or passed outwards at the ports in question, but do not imply that the imports were for consumption at these ports or that the exports originated there.

**21.—Imports of Canada by values entered for consumption from British Empire and Foreign Countries under the General, Preferential, and Treaty Rate Tariffs in the two fiscal years 1920-1921.**

Countries.	1920.			1921.		
	General.	Preferential.	Treaty rates.	General.	Preferential.	Treaty rates.
	\$	\$	\$	\$	\$	\$
<b>British Empire, totals.....</b>	<b>15,002,451</b>	<b>102,111,057</b>	<b>2,255,891</b>	<b>38,709,037</b>	<b>160,941,132</b>	<b>2,054,425</b>
United Kingdom.....	10,648,575	80,374,308	2,222,086	33,856,392	134,281,317	1,998,197
Australia.....	307,611	—	3,631	333,015	—	3,199
British West Indies.....	501,810	6,848,409	—	652,523	7,248,849	24
British Guiana.....	210,694	6,836,359	—	592,910	8,086,061	—
India.....	1,404,046	4,427,861	25	732,184	5,290,958	15
New Zealand.....	25,690	539,969	—	388,265	1,676,729	—
Fiji Islands.....	—	714,146	—	880	1,509,506	—
Hong Kong.....	1,438,668	—	29,477	1,958,368	—	52,598
Newfoundland.....	23,460	—	—	74,240	—	—
Ceylon.....	319,757	1,959,537	—	55,076	2,129,254	—
Straits Settlements.....	50,214	360,635	—	13,094	683,016	—
Other Possessions.....	71,926	49,833	675	52,090	34,442	392
<b>Foreign countries, totals....</b>	<b>554,963,203</b>	<b>—</b>	<b>19,322,530</b>	<b>625,181,444</b>	<b>—</b>	<b>20,675,368</b>
Austria-Hungary.....	49,723	—	—	94,927	—	—
Belgium.....	586,297	—	112,138	2,745,858	—	601,821
France.....	4,227,352	—	4,124,542	13,168,820	—	2,730,521
Germany.....	42,560	—	—	533,080	—	—
Holland.....	749,753	—	7,161	3,091,057	—	110,207
Japan.....	4,177,022	—	8,603,278	4,564,441	—	6,270,662
Spain.....	1,129,526	—	299,818	1,779,015	—	483,668
Switzerland.....	1,747,789	—	5,743,006	3,609,665	—	9,925,538
United States.....	499,716,625	—	—	544,010,980	—	—
Italy.....	643,111	—	55,923	1,164,079	—	68,963
Norway.....	66,871	—	345,990	127,059	—	339,016
Sweden.....	315,603	—	20,577	350,634	—	36,362
Alaska.....	106,265	—	—	208,924	—	—
Other countries.....	41,404,706	—	10,127	49,732,905	—	108,610

**22.—Aggregate Trade of Canada by Countries for the fiscal year ended March 31, 1922.**

Countries.	Imports for Consumption.	Exports of Canadian Produce.	Total Trade.
	\$	\$	\$
<b>British Empire—</b>			
United Kingdom.....	117,134,576	299,361,675	416,496,251
<b>Africa—</b>			
British East.....	7,110	168,203	175,314
British South.....	127,738	3,890,390	4,018,128
British West.....	19,202	144,778	163,980
Bermuda.....	98,246	989,113	1,087,359
<b>British East Indies—</b>			
Ceylon.....	2,187,329	94,480	2,281,809
India.....	5,279,857	1,637,145	6,917,002
Straits Settlements.....	1,445,774	608,294	2,054,068
Other British East Indies.....	15,460	1,256	16,716
British Guiana.....	6,166,664	2,298,105	8,464,769
British Honduras.....	79,756	150,964	230,720
<b>British West Indies—</b>			
Barbados.....	2,994,559	1,377,984	4,372,542
Jamaica.....	2,213,873	2,214,164	4,428,037
Trinidad and Tobago.....	1,678,658	4,555,023	6,233,681
Other British West Indies.....	1,226,363	1,829,798	3,056,161
Egypt.....	68,563	494,575	563,138
Gibraltar.....	—	195,757	195,757
Hong Kong.....	2,114,977	1,411,699	3,526,676
Newfoundland.....	1,387,766	9,317,639	10,705,405

22.—Aggregate Trade of Canada by Countries for the fiscal year ended March 31, 1922—concluded.

Countries.	Imports for Consumption.	Exports of Canadian Produce.	Total Trade.
	\$	\$	\$
<b>British Empire—concluded.</b>			
Oceania—			
Australia.....	1,041,027	10,678,600	11,719,627
Fiji.....	1,966,180	124,390	2,090,570
New Zealand.....	1,783,500	4,128,531	5,912,031
Other British Possessions.....	23,063	169,335	192,398
<b>Total British Empire.....</b>	<b>149,060,241</b>	<b>345,841,898</b>	<b>494,902,139</b>
<b>Foreign Countries—</b>			
Argentine Republic.....	2,355,100	3,233,423	5,588,523
Belgium.....	3,817,931	12,359,300	16,177,231
Brazil.....	1,495,245	2,002,449	3,497,694
Chile.....	20,471	290,678	311,149
China.....	1,410,552	1,900,627	3,311,179
Colombia.....	360,509	127,199	487,708
Central American States <sup>1</sup> .....	519,142	335,517	854,659
Cuba.....	13,042,568	3,974,432	17,017,000
Czecho-Slovakia.....	351,924	26,046	377,970
Denmark.....	119,315	2,243,181	2,362,496
Finland.....	2,720	597,523	600,252
France.....	13,467,803	8,208,228	21,676,031
French Africa.....	11,573	535,696	547,269
French West Indies.....	—	66,082	66,082
St. Pierre and Miquelon.....	19,026	429,190	448,216
Other Possessions.....	—	1,330	1,330
Germany.....	2,006,513	4,509,547	6,516,060
Greece.....	1,033,981	5,247,035	6,281,016
Haiti.....	42,050	71,967	114,017
Italy.....	1,387,370	15,335,818	16,723,188
Japan.....	8,192,238	14,831,520	23,023,758
Korea.....	—	23,331	23,331
Mexico.....	3,798,202	1,197,597	4,995,799
Netherlands.....	4,002,145	9,582,924	13,585,069
Dutch East Indies.....	833,101	951,569	1,784,670
Dutch Guiana.....	—	127,509	127,509
Dutch West Indies.....	1,505	45,433	46,938
Norway.....	409,359	2,599,447	3,008,806
Panama.....	—	178,770	178,770
Peru.....	6,983,403	71,683	7,055,086
Poland and Danzig.....	24,194	271,576	295,770
Portugal.....	220,956	87,664	308,620
Portuguese Africa.....	—	175,029	175,029
Russia.....	1,683	2,617,739	2,619,422
Santo Domingo.....	4,065,910	64,497	4,130,407
Siam.....	5,659	56,029	61,688
Spain.....	1,782,440	816,977	2,599,417
Sweden.....	245,295	1,220,196	1,465,491
Switzerland.....	8,671,608	345,626	8,017,234
Turkey.....	852,507	641,422	1,493,929
United States.....	516,105,107	293,906,643	810,011,750
Alaska.....	276,807	293,184	569,991
Hawaii.....	114,900	60,560	175,460
Philippine Islands.....	189,264	170,821	360,085
Porto Rico.....	105	1,301,979	1,302,084
Uruguay.....	47,847	151,291	199,138
Venezuela.....	294,305	512,499	806,804
Other Foreign Countries.....	161,749	599,999	761,748
<b>Total Foreign Countries.....</b>	<b>598,744,091</b>	<b>394,398,782</b>	<b>993,142,873</b>
<b>Total Imports and Exports.....</b>	<b>747,804,332</b>	<b>740,240,680</b>	<b>1,488,045,012</b>

<sup>1</sup>Guatemala, Salvador, Honduras, Nicaragua, Costa Rica.

<sup>2</sup>The total trade in this Table does not correspond with that of the Table on page 398, because exports of foreign produce are not included here.



**23.—Values of Exports from Canada of Home Produce to the British Empire and to Foreign Countries in the five fiscal years 1918-1922.**

Countries.	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
<b>British Empire—total</b> .....	<b>888,788,376</b>	<b>605,159,789</b>	<b>561,788,003</b>	<b>403,452,219</b>	<b>345,841,898</b>
United Kingdom.....	845,480,069	540,750,977	489,152,637	312,844,871	299,361,675
Australia.....	8,653,635	14,019,629	11,415,623	18,112,861	10,678,600
New Zealand.....	4,089,823	6,227,892	6,987,008	11,873,000	4,128,531
Bermuda.....	814,550	1,179,025	1,249,020	1,523,992	989,113
British Africa.....	5,186,116	12,242,408	9,825,526	15,556,593	4,203,371
British Guiana.....	1,978,323	2,646,169	3,109,351	3,594,118	2,298,105
British Honduras.....	13,468	51,808	29,350	38,783	150,964
British India.....	2,995,630	2,905,426	4,818,053	4,196,350	1,637,145
Egypt and Sudan.....	579,702	924,932	227,652	914,718	494,575
Straits Settlements.....	761,607	844,244	1,742,554	1,843,744	608,294
East Indies, all other.....	17,238	82,071	201,652	348,804	95,736
British West Indies.....	6,838,563	10,200,582	10,869,276	13,030,225	9,976,969
Fiji Islands.....	169,040	117,962	124,005	170,879	124,390
Cibraltar.....	193	607,637	4,380,054	509,814	195,757
Hong Kong.....	1,003,900	995,116	1,343,887	2,000,825	1,411,699
Newfoundland.....	10,191,564	11,325,235	16,175,443	16,676,728	9,317,639
All other.....	14,955	38,676	136,902	215,914	169,335
<b>Foreign countries—total</b> .....	<b>651,239,412</b>	<b>611,284,017</b>	<b>677,704,095</b>	<b>785,711,482</b>	<b>394,398,782</b>
Alaska.....	505,066	300,112	432,744	482,312	293,184
Argentina.....	1,203,142	4,603,130	6,126,457	8,171,980	3,233,423
Austria-Hungary.....	—	—	33,168	129,536	—
Belgium.....	4,909,453	950,318	28,463,855	40,252,487	12,359,300
Brazil.....	974,368	4,088,534	2,703,488	2,835,191	2,002,449
Central Am. States <sup>1</sup> .....	56,302	175,699	181,351	473,936	335,517
Chile.....	314,384	2,321,329	890,960	864,309	290,678
China.....	1,954,055	2,856,933	6,665,805	4,906,579	1,900,627
Denmark.....	39,230	42,039	2,938,026	523,485	2,243,181
Dutch East Indies.....	344,196	996,575	1,492,775	2,426,087	951,569
France.....	201,053,676	96,103,142	61,108,693	27,428,308	8,208,228
French Africa.....	795	72,815	362,637	1,312,859	535,696
Germany.....	—	—	610,528	8,215,237	4,509,547
Greece.....	4,262	16,902	29,588,984	20,834,577	5,247,035
Hawaii.....	493,027	709,246	163,970	132,798	60,560
Holland.....	2,462,574	198,985	5,653,218	20,208,418	9,582,924
Italy.....	3,336,059	13,181,514	16,959,557	57,758,343	15,335,818
Japan.....	4,861,244	12,245,439	7,732,514	6,414,920	14,831,520
Mexico.....	482,428	568,943	410,825	1,086,197	1,197,597
Norway.....	173,491	1,149,123	4,798,299	5,119,365	2,599,447
Peru.....	99,377	283,022	273,967	614,472	71,683
Philippines.....	33,153	68,551	292,547	511,741	170,821
Portugal.....	14,878	367,446	197,385	1,476,894	87,664
Roumania.....	—	—	12,953,605	3,801,584	15,383
Russia.....	4,008,475	6,164,658	1,492,041	246,719	2,617,739
St. Pierre and Miquelon.....	345,303	523,488	748,573	590,055	429,190
Spain.....	98,256	231,095	1,096,053	5,110,725	816,977
Sweden.....	15,596	19,220	4,449,105	5,528,361	1,220,196
Switzerland.....	3,921	7,665	1,484,416	1,410,777	345,626
Turkey.....	—	621,023	2,336,717	2,791,538	641,422
United States.....	417,812,807	454,873,170	464,028,183	542,322,967	293,906,643
Uruguay.....	97,916	332,952	689,538	816,503	151,291
Venezuela.....	103,935	40,441	404,007	278,541	512,499
West Indies—Cuba.....	4,015,940	5,035,975	6,329,783	6,573,768	3,974,432
American Virgin Islands <sup>2</sup> .....	11,010	324	2,256	1,131	2,275
Porto Rico.....	751,436	1,071,805	1,489,667	1,315,716	1,301,979
Santo Domingo.....	45,087	39,663	169,186	247,436	64,497
Other West Indies.....	171,989	162,946	513,503	185,097	111,515
All other.....	442,581	859,795	1,435,709	2,310,442	2,238,650

<sup>1</sup>Guatemala, Salvador, Honduras, Nicaragua and Costa Rica.

<sup>2</sup>Formerly Danish West Indies.

24.—Values of Imports into Canada of Merchandise entered for Consumption from the British Empire and from Foreign Countries in the five fiscal years 1918-1922; also of Coin and Bullion.

Countries.	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
<b>British Empire—total.</b>	<b>128,055,371</b>	<b>123,671,540</b>	<b>174,351,659</b>	<b>266,002,688</b>	<b>149,060,241</b>
United Kingdom.....	81,324,283	73,035,118	126,362,631	213,973,562	117,134,576
Australia.....	2,356,665	4,963,446	1,371,775	791,980	1,041,027
New Zealand.....	3,735,559	7,855,436	3,494,600	4,219,965	1,783,500
Bermuda.....	84,940	39,056	55,604	76,959	98,246
British Africa.....	568,842	1,308,016	919,078	262,782	154,050
British Guiana.....	6,716,647	6,747,072	7,412,931	9,085,108	6,166,664
British Honduras.....	352,028	298,906	302,043	134,739	79,756
British India.....	9,355,593	8,395,290	7,785,254	6,766,751	5,279,857
Straits Settlements.....	3,120,996	5,081,663	5,269,180	5,185,611	1,445,774
East Indies, all other.....	3,977,637	1,746,481	3,181,978	2,355,042	2,202,789
British West Indies.....	10,550,550	8,437,825	12,114,790	14,833,746	8,113,453
Fiji.....	1,151,369	525,804	714,306	1,510,599	1,966,180
Hong Kong.....	1,805,515	2,121,909	3,208,836	3,516,760	2,114,977
Newfoundland.....	2,947,527	3,098,834	2,146,414	2,886,203	1,387,766
Egypt and Sudan.....	4,297	16,073	10,271	391,326	68,563
All other.....	2,923	611	1,968	11,555	23,063
<b>Foreign Countries—total</b>	<b>834,488,375</b>	<b>796,040,165</b>	<b>890,176,464</b>	<b>974,156,194</b>	<b>598,744,091</b>
Alaska.....	10,374	52,787	415,585	309,463	276,807
Argentina.....	984,955	1,139,267	3,402,554	2,552,831	2,355,100
Austria-Hungary.....	75	—	49,723	96,164	34,637 <sup>a</sup>
Belgium.....	12,973	6,270	911,407	4,693,368	3,817,931
Brazil.....	990,777	1,156,332	1,973,768	2,151,066	1,495,245
Central Am. States <sup>1</sup> .....	398,374	393,477	343,200	376,301	519,142
Chile.....	478,378	1,059,557	240	97,579	20,471
China.....	1,336,890	1,954,466	1,205,229	1,897,346	1,410,552
Denmark.....	14,388	41,252	105,310	119,994	119,315
Dutch East Indies.....	2,831,642	3,834,746	3,709,400	993,764	833,101
Dutch Guiana.....	203,473	117,732	87,943	—	—
France.....	5,274,064	3,632,900	10,630,865	19,138,062	13,467,803
French Africa.....	997	—	—	2,240	11,573
Germany.....	27,181	75	44,255	1,547,685	2,006,513
Greece.....	20,296	83	729,830	817,157	1,033,981
Hawaii.....	30,840	3,467,856	403,687	225,755	114,900
Holland.....	1,054,176	495,409	2,266,169	4,237,791	4,002,145
Italy.....	771,187	555,112	999,040	1,745,330	1,387,370
Japan.....	12,255,319	13,618,122	13,637,287	11,360,821	8,192,238
Mexico.....	664,790	584,047	2,648,915	2,185,399	3,798,202
Norway.....	141,058	25,785	461,848	616,978	409,359
Peru.....	2,362,243	2,580,813	5,072,408	4,171,912	6,983,403
Philippines.....	23,329	169,896	47,014	229,907	189,264
Portugal.....	238,420	111,689	312,912	517,222	220,956
Russia.....	8,477	83,888	14,496	17,390	1,683
St. Pierre and Miquelon.....	3,809	7,092	40,297	56,257	19,026
Spain.....	808,807	697,643	1,528,298	2,317,179	1,782,440
Sweden.....	110,172	178,855	360,353	555,927	245,295
Switzerland.....	3,146,482	1,780,812	7,758,051	14,143,448	8,671,608
Turkey.....	—	—	233,478	683,656	852,507
United States.....	791,906,125	750,203,024	801,097,318	856,176,820	516,105,107
Uruguay.....	50,481	328,687	322,086	455,105	47,847
Venezuela.....	301,292	149,155	299,240	451,357	294,305
West Indies—Cuba.....	1,085,547	3,040,953	17,585,528	30,743,239	13,042,568
American Virgin Islands <sup>2</sup> .....	—	—	—	296	—
Porto Rico.....	136	2,488	1,910	552	105
Santo Domingo.....	6,615,961	4,728,732	10,675,287	7,578,794	4,065,910
Other West Indies.....	187	—	—	5,176	1,505
All other.....	324,700	341,213	801,533	886,863	914,177
<b>Coin and Bullion.....</b>	<b>12,279,173</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

<sup>1</sup>Guatemala, Salvador, Honduras, Nicaragua and Costa Rica.

<sup>2</sup>Forme Danish We <sup>3</sup>Indies. <sup>a</sup>Austria only.

**25.—Value of Merchandise imported into and exported from Canada through the United States during the fiscal years ended March 31, 1920-1921.**

Countries whence imported and to which exported.	Merchandise imported through United States.		Merchandise exported through United States.	
	1920.	1921.	1920.	1921.
	\$	\$		\$
United Kingdom.....	4,365,089	4,215,939	96,856,014	68,721,906
Australia.....	212,608	69,817	3,747,244	3,231,020
British Africa.....	82,032	29,920	2,604,339	1,606,328
British India.....	1,881,087	1,282,176	4,576,708	1,595,421
British East Indies (Ceylon).....	1,116,751	1,021,464	197,604	74,676
British Guiana.....	1,658,397	1,442,071	131,785	86,441
British Honduras.....	193,251	—	29,294	32,315
British West Indies.....	2,321,832	2,590,659	2,448,455	1,681,099
Egypt and Sudan.....	—	500	140,483	62,357
Gibraltar.....	—	—	185,285	178,582
Hong Kong.....	—	116,737	278,861	80,151
New Zealand.....	91,111	530,033	1,406,917	850,555
Straits Settlements.....	53,733	484,542	1,419,831	753,714
Other British Possessions.....	—	35,516	142,609	88,122
<b>Total, British Empire.....</b>	<b>11,975,891</b>	<b>11,819,374</b>	<b>114,165,429</b>	<b>79,042,687</b>
Argentina.....	1,017,398	735,856	3,036,023	2,116,194
Belgium.....	3,666	41,318	4,698,279	18,527,235
Brazil.....	1,193,927	542,695	2,028,709	1,176,461
Central American States.....	20,895	58,708	177,126	1,407,537
Chile.....	—	—	824,893	805,506
China.....	54,853	186,216	719,018	327,430
Cuba.....	1,697,125	754,940	2,523,948	2,154,660
Denmark.....	12,791	12,787	2,138,778	414,719
Dutch East Indies.....	299,128	174,291	1,458,143	2,031,581
Dutch Guiana.....	58,853	—	13,556	39,481
French West Indies.....	—	—	370,860	67,664
France.....	694,289	623,294	6,859,978	10,973,633
French Africa.....	—	—	126,206	120,915
Greece.....	71,521	194,722	9,019,188	1,696,895
Hayti.....	143,210	127,053	172,732	93,068
Holland.....	245,926	219,637	2,781,873	15,841,607
Italy.....	414,428	536,532	4,404,149	18,082,516
Japan.....	165,220	1,515,794	4,619,831	1,604,614
Mexico.....	418,132	73,625	352,151	1,011,866
Norway.....	3,559	8,476	681,769	880,215
Panama.....	—	—	234,703	280,557
Peru.....	410,251	793,348	241,262	451,263
Philippine Islands.....	19,494	—	173,410	9,778
Porto Rico.....	—	10,163	652,321	415,871
Portugal.....	43,965	101,030	76,695	850,933
Roumania.....	—	—	1,742,878	361,441
Russia.....	—	—	92,250	3,339
Santo Domingo.....	4,748,905	5,862,360	164,116	230,370
Siam.....	—	—	22,490	67,997
Spain.....	549,053	354,241	757,911	3,470,441
Sweden.....	137,966	24,744	915,158	2,077,011
Switzerland.....	266,371	355,511	115,182	1,365,778
Turkey.....	30,420	252,746	591,907	2,596,228
U. S. of Colombia.....	253,453	87,239	100,737	147,655
Uruguay.....	26,753	5,624	223,641	193,375
Venezuela.....	144,878	395,070	403,568	278,447
Other countries.....	12,430	68,184	975,272 <sup>1</sup>	5,482,993 <sup>1</sup>
<b>Total, foreign countries.....</b>	<b>13,158,950</b>	<b>14,116,204</b>	<b>54,490,711</b>	<b>96,937,274</b>
<b>Grand Total.....</b>	<b>25,134,841</b>	<b>25,935,578</b>	<b>168,656,140</b>	<b>175,979,961</b>

<sup>1</sup>Includes \$572,803 exports to Germany in 1920 and \$5,062,975 in 1921.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported; during the five calendar years, 1916-1920. [From the British Annual Statement of Trade, 1920.]

(Values converted at par of exchange. £1=\$4.86½.)

Imports by Countries.	1916.	1917.	1918.	1919.	1920.
Butter—					
Russia..... cwt.	31,918	—	—	6,954	19,308
Sweden..... cwt.	970,111	—	—	426,359	1,365,849
Denmark..... cwt.	36,914	—	—	—	214
Netherlands..... cwt.	1,134,801	622,160	40,327	290,291	817,268
France..... cwt.	50,506,510	34,225,320	3,753,617	19,212,797	57,245,846
United States..... cwt.	36,202	75,880	9,885	1,641	102,567
Argentina..... cwt.	1,637,526	3,713,062	799,676	101,285	7,706,279
Australia..... cwt.	130,249	45,707	4,770	2	8,734
New Zealand..... cwt.	4,743,749	2,434,029	360,080	78	586,136
Canada..... cwt.	131,618	10,534	196,593	216,495	37,261
Other countries..... cwt.	5,741,061	516,275	11,856,490	13,368,285	2,711,473
Total..... cwt.	117,597	142,300	313,143	265,675	138,862
Value..... \$	4,576,657	6,851,517	18,478,977	16,275,170	9,921,157
Cheese—					
Netherlands..... cwt.	145,065	529,809	540,072	417,371	227,542
France..... cwt.	6,033,990	25,371,866	32,716,756	25,555,723	15,974,230
Switzerland..... cwt.	331,162	310,925	372,572	318,872	275,406
Italy..... cwt.	13,274,539	15,551,958	22,382,608	19,030,769	18,630,963
United States..... cwt.	101,531	33,057	61,971	33,337	32,140
New Zealand..... cwt.	4,163,609	1,669,685	3,767,530	2,032,261	2,322,617
Australia..... cwt.	14,280	36,144	39,325	9,566	43,111
Canada..... cwt.	606,811	1,625,385	2,096,990	622,150	2,859,809
Other countries..... cwt.	—	—	—	—	—
Total..... cwt.	2,175,415	1,806,516	1,578,558	1,560,204	1,702,203
Value..... \$	92,291,477	91,959,107	96,212,724	96,624,877	119,324,573
Eggs—					
Netherlands..... cwt.	112,587	244,865	87,896	79,217	112,196
France..... cwt.	3,115,723	7,543,304	3,024,614	3,252,340	3,524,411
Switzerland..... cwt.	7,150	1,595	69	1,279	9,324
Italy..... cwt.	155,106	52,638	4,915	45,455	373,303
United States..... cwt.	4,965	569	—	190	14,907
New Zealand..... cwt.	136,851	26,309	—	22,319	526,384
Australia..... cwt.	31,938	271	—	180	951
Canada..... cwt.	742,127	22,543	—	17,174	93,547
Other countries..... cwt.	274,687	267,138	472,328	16,169	73,344
Total..... cwt.	6,355,535	9,225,954	16,100,184	608,952	2,525,692
Value..... \$	667,214	609,700	610,655	1,239,553	1,260,642
Cheese—					
Netherlands..... cwt.	16,314,016	19,469,903	18,735,182	41,148,635	45,162,185
France..... cwt.	1	63,349	47,258	112,736	63,279
Switzerland..... cwt.	19	2,347,325	1,389,555	4,043,884	2,505,958
Italy..... cwt.	1,505,018	1,757,949	1,125,668	647,212	1,129,758
United States..... cwt.	36,169,938	56,010,564	37,451,000	23,821,058	42,897,379
New Zealand..... cwt.	564	13,229	13,229	21,714	85,859
Australia..... cwt.	13,408	18,425	703,058	870,534	2,809,678
Canada..... cwt.	—	—	—	—	—
Other countries..... cwt.	—	—	—	—	—
Total..... cwt.	2,604,124	2,946,066	2,357,103	2,118,250	2,750,260
Value..... \$	63,002,723	94,716,965	77,408,508	73,830,351	100,418,537
Eggs—					
Russia..... gt. hunds.	734,441	58,845	—	—	9,183
Sweden..... gt. hunds.	2,067,739	143,187	—	—	70,177
Denmark..... gt. hunds.	4,102	—	—	—	45,461
Netherlands..... gt. hunds.	14,230	—	—	—	401,592
France..... gt. hunds.	1,392,111	1,654,900	1,170,535	1,638,067	3,939,437
China..... gt. hunds.	6,342,128	10,951,066	12,614,560	13,510,431	34,224,139
Egypt..... gt. hunds.	84,737	202,177	—	620	48,474
Other countries..... gt. hunds.	404,260	1,050,675	—	5,743	358,906
Total..... gt. hunds.	—	—	—	6,584	15,160
Value..... \$	—	—	—	34,383	120,869
Cheese—					
Netherlands..... gt. hunds.	231,005	320,539	—	272,585	731,334
France..... gt. hunds.	689,714	1,242,279	—	1,682,344	4,013,053
China..... gt. hunds.	1,889,947	1,602,671	729,807	758,728	556,740
Egypt..... gt. hunds.	4,743,335	4,941,321	3,480,494	4,529,280	2,858,923

NOTE.—Throughout this table the cwt. is the long cwt. of 112 lb., and for eggs the great hundred=120.



**26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1916-1920—*con.***

(Values converted at par of exchange—£1=\$4.86 $\frac{1}{2}$ .)

Imports by Countries.	1916.	1917.	1918	1919.	1920.
<b>Eggs—Concluded.</b>					
Canada.....gt. hunds.	1,431,778	672,761	388,985	1,476,962	807,281
\$	5,712,435	4,007,130	3,245,405	10,854,720	7,197,474
United States.....gt. hunds.	779,716	349,339	337,345	1,408,606	331,185
\$	2,877,188	1,964,639	3,003,882	10,731,448	2,692,294
Other countries.....gt. hunds.	58,540	61,170	29,743	82,243	576,253
\$	228,324	360,085	147,684	569,838	4,366,684
<b>Total.....gt. hunds.</b>	<b>6,606,377</b>	<b>4,922,402</b>	<b>2,656,415</b>	<b>5,644,395</b>	<b>7,060,508</b>
\$	<b>23,079,353</b>	<b>24,660,382</b>	<b>22,492,025</b>	<b>41,918,187</b>	<b>56,304,111</b>
<b>Bacon—</b>					
China.....cwt.	21,632	63,037	75,818	258,271	28,265
\$	326,480	1,844,389	2,948,942	11,037,327	1,191,477
Sweden.....cwt.	—	—	—	—	4,515
\$	—	—	—	—	184,734
Denmark.....cwt.	1,641,613	1,123,155	21,491	6,644	704,075
\$	44,227,843	37,803,282	923,951	320,241	35,606,334
Netherlands.....cwt.	171,908	144,116	—	—	4,152
\$	4,503,579	4,302,216	—	—	185,060
United States.....cwt.	4,004,410	3,467,085	8,645,318	5,893,514	3,362,264
\$	81,997,620	102,500,147	362,745,600	253,625,769	143,343,284
Canada.....cwt.	1,594,114	1,767,085	1,719,736	2,094,248	1,493,008
\$	36,225,442	54,956,901	72,797,298	91,886,244	63,893,182
Other countries.....cwt.	2,278	3,096	11,099	28,521	15,351
\$	43,392	118,600	441,305	1,277,758	718,611
<b>Total.....cwt.</b>	<b>7,435,955</b>	<b>6,567,574</b>	<b>10,473,562</b>	<b>8,281,198</b>	<b>5,611,630</b>
\$	<b>167,324,356</b>	<b>201,524,535</b>	<b>439,857,096</b>	<b>358,147,339</b>	<b>245,121,682</b>
<b>Hams—</b>					
United States.....cwt.	1,493,606	1,126,736	1,419,008	1,718,363	283,591
\$	31,984,561	34,120,127	57,928,814	74,286,630	12,646,652
Canada.....cwt.	60,205	50,070	110,683	74,762	25,776
\$	1,285,535	1,593,731	4,508,232	3,179,997	1,153,760
Other countries.....cwt.	1,025	3,360	25,252	20,029	14,984
\$	24,863	106,767	968,934	836,565	662,256
<b>Total.....cwt.</b>	<b>1,554,836</b>	<b>1,180,166</b>	<b>1,554,943</b>	<b>1,813,154</b>	<b>324,351</b>
\$	<b>33,294,959</b>	<b>35,821,625</b>	<b>63,405,980</b>	<b>78,303,192</b>	<b>14,462,668</b>
<b>Lard—</b>					
United States.....cwt.	1,866,568	1,379,498	2,586,187	1,833,685	1,149,600
\$	32,961,914	40,278,222	96,396,364	77,517,561	50,512,890
Canada.....cwt.	35,004	23,784	89,493	79,292	125,260
\$	582,808	654,878	3,355,411	3,355,046	5,354,628
Brazil.....cwt.	—	10,016	25,288	38,416	1,840
\$	—	334,180	881,869	1,456,652	53,144
China.....cwt.	26,176	63,961	30,946	158,354	143,500
\$	359,374	1,661,850	977,343	5,887,085	5,368,430
Other countries.....cwt.	6,079	22,935	28,490	68,583	26,300
\$	79,764	590,331	898,186	2,659,531	970,802
<b>Total.....cwt.</b>	<b>1,933,827</b>	<b>1,500,194</b>	<b>2,760,404</b>	<b>2,178,330</b>	<b>1,446,500</b>
\$	<b>33,983,860</b>	<b>43,519,461</b>	<b>102,509,173</b>	<b>90,875,875</b>	<b>62,259,894</b>
<b>Wheat—</b>					
United States.....cwt.	64,544,100	54,208,300	24,757,610	31,769,300	45,422,300
\$	223,849,595	242,417,300	110,348,133	150,386,881	339,878,783
Japan.....cwt.	—	—	—	—	2,420,500
\$	—	—	—	—	17,531,485
China.....cwt.	—	—	—	—	330,000
\$	—	—	—	—	2,535,742
Argentina.....cwt.	4,495,700	6,700,600	14,389,400	6,819,100	30,930,800
\$	16,652,332	30,020,296	64,501,816	30,921,175	186,708,168
British India.....cwt.	5,611,900	2,744,700	621,400	100	20,000
\$	21,698,617	12,361,499	2,882,132	180	170,333

NOTE.—For eggs the great hundred=120.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1916-1920—*con.*

(Values converted at par of exchange. £1=\$4.86 $\frac{2}{3}$ .)

Imports by Countries.		1916.	1917.	1918.	1919.	1920.
Wheat—concluded.						
Australia.....	cwt.	3,699,620	9,243,700	2,013,700	14,952,700	19,966,100
	\$	13,430,253	43,414,244	9,222,610	66,301,968	90,695,044
Canada.....	cwt.	21,551,000	18,408,300	15,968,700	17,864,900	10,189,400
	\$	74,194,027	82,488,735	70,565,577	85,212,043	75,831,651
Other countries.....	cwt.	168,800	129,406	190,800	36,900	49,226
	\$	638,269	563,369	889,767	167,297	848,431
<b>Total.....</b>	<b>cwt.</b>	<b>100,070,320</b>	<b>91,435,006</b>	<b>57,947,610</b>	<b>71,443,000</b>	<b>109,328,326</b>
	<b>\$</b>	<b>350,462,994</b>	<b>411,265,443</b>	<b>258,410,035</b>	<b>332,989,544</b>	<b>714,199,637</b>
Barley—						
Turkey in Asia.....	cwt.	96,000	—	—	—	28,600
	\$	240,476	—	—	—	130,115
Tunis.....	cwt.	13,600	—	—	290,500	—
	\$	41,488	—	—	1,638,169	—
United States.....	cwt.	9,019,900	5,643,900	4,070,300	10,793,200	6,227,400
	\$	28,441,758	27,974,292	21,354,461	57,764,476	36,765,166
Chile.....	cwt.	236,800	75,200	—	351,300	867,700
	\$	860,159	357,685	—	1,904,935	5,435,444
Argentina.....	cwt.	443,200	397,000	—	221,500	419,000
	\$	1,400,924	1,724,401	—	1,090,971	2,054,112
British India.....	cwt.	2,867,800	1,390,700	—	—	—
	\$	9,825,664	6,149,622	—	5,100	—
Canada.....	cwt.	2,841,200	1,482,700	952,000	24,625	2,691,200
	\$	8,940,437	6,818,463	5,036,786	4,830,200	14,067,990
Roumania.....	cwt.	—	—	—	23,525,150	1,442,800
	\$	—	—	—	—	6,570,078
Russia.....	cwt.	—	—	—	—	205,800
	\$	—	—	—	—	948,649
Other countries.....	cwt.	301,000	149,000	2,900	152,100	525,200
	\$	917,021	619,098	15,344	856,738	4,391,511
<b>Total.....</b>	<b>cwt.</b>	<b>15,819,500</b>	<b>9,138,500</b>	<b>5,025,200</b>	<b>16,643,900</b>	<b>12,667,700</b>
	<b>\$</b>	<b>50,667,927</b>	<b>43,643,561</b>	<b>26,406,591</b>	<b>86,805,064</b>	<b>70,363,065</b>
Oats—						
United States.....	cwt.	5,102,100	8,114,700	6,009,400	2,956,421	194,600
	\$	13,290,682	36,200,948	30,434,610	14,516,099	941,792
Chile.....	cwt.	929,800	1,206,800	39,200	528,000	27,900
	\$	2,668,082	5,602,638	154,517	2,793,102	117,422
Argentina.....	cwt.	4,446,500	924,600	1,524,270	1,069,700	4,676,200
	\$	10,735,059	3,094,178	8,018,607	9,939,407	20,995,131
Canada.....	cwt.	1,764,400	2,219,500	3,409,700	940,500	697,500
	\$	4,442,230	10,760,433	17,500,295	4,397,715	3,227,884
Other countries.....	cwt.	260,700	156,100	—	216,800	533,200
	\$	718,431	589,500	—	1,076,935	2,247,281
<b>Total.....</b>	<b>cwt.</b>	<b>12,503,500</b>	<b>12,621,700</b>	<b>10,982,570</b>	<b>6,711,421</b>	<b>6,101,600</b>
	<b>\$</b>	<b>31,854,484</b>	<b>56,247,697</b>	<b>56,108,029</b>	<b>32,723,258</b>	<b>27,412,576</b>
Peas, whole—						
Canada.....	cwt.	12,530	11,700	50,430	37,756	12,620
	\$	75,287	92,540	803,978	429,172	202,935
Netherlands.....	cwt.	1,485	950	240	6,445	41,306
	\$	9,354	7,373	5,801	82,169	362,650
Japan.....	cwt.	458,210	507,850	687,544	541,140	191,380
	\$	3,839,016	6,177,976	10,829,078	6,825,690	1,543,161
British India.....	cwt.	307,970	448,070	893,380	12,960	100
	\$	1,124,701	2,643,681	7,338,846	170,528	1,587
New Zealand.....	cwt.	25,564	44,340	48,940	171,580	86,630
	\$	132,801	348,453	493,859	1,645,386	858,621
United States.....	cwt.	79,910	101,870	409,820	83,280	30,384
	\$	649,520	1,249,482	5,880,350	1,253,639	751,618
Australia.....	cwt.	7,330	47,560	41,526	81,350	38,180
	\$	50,024	521,634	506,868	772,472	315,228
China.....	cwt.	84,160	57,360	15,220	155,900	114,420
	\$	321,229	315,151	86,242	940,673	689,782
Other countries.....	cwt.	4,172	56,050	28,137	42,980	50,700
	\$	23,079	601,287	310,459	431,088	339,353
<b>Total.....</b>	<b>cwt.</b>	<b>981,331</b>	<b>1,275,750</b>	<b>2,175,237</b>	<b>1,133,391</b>	<b>571,720</b>
	<b>\$</b>	<b>6,325,011</b>	<b>11,957,577</b>	<b>26,256,795</b>	<b>12,550,817</b>	<b>5,064,935</b>

**26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1916-1920.—concluded.**

(Values converted at par of exchange. £1=\$4.86½.)

Imports by Countries.	1916.	1917.	1918.	1919.	1920.
<b>Corn—</b>					
Brazil.....cwt.	34,900	295,618	163,500	89,800	—
\$	120,450	1,306,121	980,731	427,605	—
United States.....cwt.	6,991,800	10,670,300	7,921,277	871,700	1,632,000
\$	18,833,981	40,683,255	35,909,260	3,318,088	7,109,776
Argentina.....cwt.	20,843,700	9,578,200	3,584,000	13,914,800	29,237,100
\$	60,795,432	38,696,438	16,905,632	54,251,804	114,401,015
Canada.....cwt.	2,174,000	1,635,700	129,200	188,600	343,500
\$	5,856,133	6,156,572	563,823	1,062,335	1,604,428
S. Africa (British).....cwt.	2,490,600	2,679,000	2,442,600	1,400,700	430,700
\$	6,790,454	11,760,042	11,058,668	6,191,836	1,757,665
Egypt (British).....cwt.	1,161,300	600	—	—	—
\$	3,174,181	1,538	—	—	—
India (British).....cwt.	54,400	500	198,400	—	2,400
\$	168,960	1,884	872,647	—	12,167
Other Br. Possessions.....cwt.	35,100	19,100	48,700	44,500	26,360
\$	95,148	86,223	265,623	227,716	105,680
Roumania.....cwt.	—	—	—	—	1,691,100
\$	—	—	—	—	6,253,482
Other countries.....cwt.	373,410	129,900	2,500	350,800	476,900
\$	993,330	519,380	12,483	1,301,176	1,962,479
<b>Total.....cwt.</b>	<b>34,159,210</b>	<b>25,008,918</b>	<b>14,490,177</b>	<b>16,860,900</b>	<b>33,840,060</b>
<b>\$</b>	<b>96,837,069</b>	<b>99,211,453</b>	<b>86,568,867</b>	<b>66,780,560</b>	<b>133,206,672</b>
<b>Flour, wheat—</b>					
United States.....cwt.	5,182,049	8,401,782	17,963,100	10,274,070	5,837,400
\$	21,397,405	49,384,125	116,942,701	72,629,247	52,911,665
Australia.....cwt.	501,360	1,851,900	1,679,100	1,577,000	1,481,200
\$	2,227,006	11,941,666	11,515,964	11,144,136	11,318,514
Canada.....cwt.	4,227,611	3,955,500	5,564,700	5,566,100	2,318,601
\$	17,860,740	25,548,915	37,336,410	39,530,936	21,478,717
China.....cwt.	—	116,500	929,200	190,700	2,067,600
\$	—	705,219	6,423,075	1,302,729	15,856,296
Japan.....cwt.	23,900	356,400	136,900	31,200	1,100
\$	107,442	2,198,944	920,627	214,323	7,446
Other countries.....cwt.	25,405	17,000	86,600	72,000	263,839
\$	106,997	106,040	517,015	394,283	1,824,470
<b>Total.....cwt.</b>	<b>9,960,325</b>	<b>14,339,782</b>	<b>26,359,600</b>	<b>17,711,070</b>	<b>11,969,740</b>
<b>\$</b>	<b>41,699,590</b>	<b>89,884,909</b>	<b>173,655,792</b>	<b>125,215,654</b>	<b>103,397,108</b>
<b>Oatmeal—</b>					
United States.....cwt.	150,083	489,971	633,646	332,763	66,023
\$	661,341	4,174,052	5,059,406	2,553,769	514,275
Canada.....cwt.	183,114	176,961	242,924	219,618	86,368
\$	824,530	1,262,296	1,820,401	1,652,861	685,416
Other countries.....cwt.	—	359	8,704	4,376	2,421
\$	—	2,166	60,920	35,064	17,807
<b>Total.....cwt.</b>	<b>333,197</b>	<b>667,291</b>	<b>885,274</b>	<b>556,757</b>	<b>154,812</b>
<b>\$</b>	<b>1,485,871</b>	<b>5,438,514</b>	<b>6,940,727</b>	<b>4,241,694</b>	<b>1,217,498</b>
<b>Rolled Oats<sup>1</sup>—</b>					
United States.....cwt.	309,575	1,468,658	1,826,569	653,383	258,947
\$	1,562,370	12,189,180	15,052,562	5,653,612	2,435,314
Canada.....cwt.	323,028	107,563	47,344	161,444	253,845
\$	1,720,547	762,815	369,711	1,867,937	2,693,062
Other countries.....cwt.	193	2,723	5,479	1,067	10,380
\$	1,022	26,548	42,427	8,088	30,928
<b>Total.....cwt.</b>	<b>632,796</b>	<b>1,578,944</b>	<b>1,879,392</b>	<b>815,894</b>	<b>523,172</b>
<b>\$</b>	<b>3,283,939</b>	<b>12,978,543</b>	<b>15,464,700</b>	<b>7,029,637</b>	<b>5,209,304</b>

<sup>1</sup>Including other oat products in 1920.

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917 and the calendar years 1918, 1919 and 1920.

(From the U.S. Reports on Foreign Commerce and Navigation.)

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
<b>Live Cattle—</b>					
Belgium..... NO.	—	—	—	9,067	20,300
\$	—	—	—	1,759,021	5,734,656
Cuba..... NO.	826	1,476	1,333	13,943	20,766
\$	47,307	88,456	122,623	627,649	2,043,021
France..... NO.	9,901	—	—	11,314	184
\$	1,722,775	—	—	2,179,406	43,144
United Kingdom..... NO.	815	—	—	—	100
\$	169,016	—	—	—	20,000
Bermuda..... NO.	952	842	318	10	31
\$	107,585	99,405	41,006	2,150	8,336
Canada..... NO.	4,511	6,382	7,314	11,192	4,624
\$	162,515	462,728	567,415	858,621	575,194
Mexico..... NO.	3,990	4,324	7,885	23,923	27,758
\$	104,853	231,893	256,116	823,250	1,478,779
Other countries..... NO.	29	516	430	410	11,539
\$	64,217	32,854	95,598	189,424	849,395
<b>Total..... NO.</b>	<b>21,287</b>	<b>13,387</b>	<b>17,280</b>	<b>69,859</b>	<b>85,302</b>
<b>                  \$</b>	<b>2,378,248</b>	<b>949,503</b>	<b>1,082,758</b>	<b>6,439,521</b>	<b>10,752,525</b>
<b>Live Hogs—</b>					
United Kingdom..... NO.	9,923	1,909	—	—	178
\$	93,489	24,976	—	—	6,230
Mexico..... NO.	2,152	10,403	132	3,987	5,237
\$	21,407	164,337	4,062	85,392	135,009
Cuba..... NO.	9,508	9,288	9,583	19,947	49,021
\$	113,996	146,925	276,475	521,035	1,494,739
Other countries..... NO.	465	326	593	811	814
\$	9,826	11,614	53,192	77,484	87,806
<b>Total..... NO.</b>	<b>22,048</b>	<b>21,926</b>	<b>10,308</b>	<b>24,745</b>	<b>75,250</b>
<b>                  \$</b>	<b>238,718</b>	<b>347,852</b>	<b>333,729</b>	<b>683,911</b>	<b>1,723,784</b>
<b>Live Horses—</b>					
France..... NO.	187,459	117,842	—	862	266
\$	43,995,577	26,946,646	—	287,516	136,100
Italy..... NO.	32,599	21,473	811	8	12
\$	6,752,590	5,274,570	174,740	43,000	6,000
United Kingdom..... NO.	49,412	100,110	33,547	98	356
\$	10,807,690	20,594,684	7,134,298	100,600	307,600
Canada..... NO.	82,311	28,546	13,032	9,848	7,062
\$	11,448,925	4,763,909	1,992,305	1,358,404	1,250,872
Mexico..... NO.	4,661	2,659	749	5,438	3,285
\$	270,884	106,950	42,475	271,642	230,483
Cuba..... NO.	630	1,000	2,930	737	2,200
\$	112,101	155,910	480,652	133,575	437,687
Other countries..... NO.	481	7,044	101	2,700	1,157
\$	143,379	1,682,660	34,005	661,659	347,658
<b>Total..... NO.</b>	<b>357,553</b>	<b>278,674</b>	<b>51,170</b>	<b>19,691</b>	<b>14,339</b>
<b>                  \$</b>	<b>73,631,146</b>	<b>59,525,329</b>	<b>9,858,329</b>	<b>2,856,396</b>	<b>2,716,400</b>
<b>Live Mules—</b>					
France..... NO.	15,059	12,376	—	—	339
\$	3,716,945	2,683,428	—	—	135,600
United Kingdom..... NO.	66,063	51,303	12,267	—	—
\$	13,359,070	10,443,687	2,474,050	—	—
Canada..... NO.	922	2,435	2,497	342	156
\$	118,668	402,829	463,282	38,518	26,450
Mexico..... NO.	2,838	2,807	1,244	3,696	5,214
\$	347,206	262,283	130,278	503,203	834,159
Cuba..... NO.	1,629	2,124	435	2,039	2,037
\$	273,181	350,151	90,670	440,688	576,284
Egypt..... NO.	17,151	32,797	—	—	—
\$	3,435,850	6,941,460	—	—	—
Other countries..... NO.	8,253	32,847	876	1,045	1,343
\$	1,709,392	6,717,016	202,373	206,771	293,850
<b>Total..... NO.</b>	<b>111,915</b>	<b>136,689</b>	<b>17,319</b>	<b>7,122</b>	<b>9,089</b>
<b>                  \$</b>	<b>22,960,312</b>	<b>27,800,854</b>	<b>3,360,653</b>	<b>1,189,180</b>	<b>1,866,343</b>



27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Live sheep—					
Canada..... NO.	48,149	56,648	7,512	29,620	6,724
..... \$	195,879	341,863	104,580	273,924	58,582
Mexico..... NO.	436	760	115	4,421	39,630
..... \$	2,622	9,922	1,810	74,746	416,337
Japan..... NO.	34	32	93	176	729
..... \$	3,000	1,400	5,800	12,242	69,450
Other countries..... NO.	3,659	1,371	242	314	1,795
..... \$	30,034	14,750	8,692	9,062	27,321
<b>Total..... NO.</b>	<b>52,278</b>	<b>58,511</b>	<b>7,962</b>	<b>34,531</b>	<b>48,878</b>
<b>..... \$</b>	<b>231,535</b>	<b>367,935</b>	<b>120,882</b>	<b>369,974</b>	<b>571,690</b>
All other animals, including fowls—					
Cuba..... \$	40,038	49,792	76,752	154,223	214,081
Canada..... \$	122,380	160,098	163,472	207,321	248,701
Mexico..... \$	68,802	123,830	32,834	57,373	142,908
Other countries..... \$	100,117	57,660	15,587	45,785	96,528
<b>Total..... \$</b>	<b>331,337</b>	<b>391,380</b>	<b>288,645</b>	<b>464,702</b>	<b>702,218</b>
Barley—					
Belgium..... bush.	25,595	200,679	1,783,545	2,330,882	1,469,499
..... \$	22,667	234,073	2,668,357	3,314,343	2,384,639
Denmark..... bush.	1,260,268	722,284	—	1,419,723	—
..... \$	960,270	710,282	—	1,897,225	—
France..... bush.	349,221	273,949	2,866,026	16,626	800
..... \$	292,908	223,300	5,188,815	22,438	2,240
Canada..... bush.	6,545	308,102	498,714	746,921	206,415
..... \$	4,054	316,698	743,237	967,663	267,079
Greece..... bush.	880,268	91,000	—	465,683	246,022
..... \$	697,979	72,800	—	726,325	390,538
Italy..... bush.	—	201,593	3,190,683	410,418	—
..... \$	—	302,390	5,570,839	410,418	—
Netherlands..... bush.	2,698,426	2,840,163	—	6,302,411	557,791
..... \$	1,982,369	2,924,706	—	8,023,947	673,330
Norway..... bush.	2,445,716	1,217,792	218,442	115,035	68,001
..... \$	1,917,414	1,366,275	334,883	179,888	114,876
Sweden..... bush.	517,096	459,696	—	368,743	—
..... \$	355,629	703,660	—	492,248	—
United Kingdom..... bush.	18,646,114	9,112,279	9,775,514	24,783,469	14,262,383
..... \$	13,970,963	10,850,329	15,241,942	36,761,108	21,641,125
Mexico..... bush.	232,588	42,981	36,955	80,793	105,991
..... \$	168,939	46,298	51,814	115,081	164,335
Panama..... bush.	971	194	24	424	926,752
..... \$	720	266	44	1,058	1,443,977
Other countries..... bush.	410,352	910,365	435,316	570,712	10,572
..... \$	289,621	1,276,205	765,446	920,577	83,050
<b>Total..... bush.</b>	<b>27,473,160</b>	<b>16,381,077</b>	<b>18,805,219</b>	<b>37,611,840</b>	<b>17,854,227</b>
<b>..... \$</b>	<b>20,663,533</b>	<b>19,027,082</b>	<b>30,565,377</b>	<b>53,832,319</b>	<b>27,165,189</b>
Bran and middlings, total..... ton <sup>1</sup>	14,613	7,428	7,372	4,517	3,091
..... \$	432,288	279,650	337,285	233,114	162,958
Buckwheat, total..... bush.	515,304	260,102	1,420	186,074	299,893
..... \$	481,014	350,606	3,021	307,454	543,468
Corn—					
Belgium..... bush.	4,550	581,371	3,467,151	1,009,969	71,787
..... \$	4,191	590,771	6,371,356	1,607,493	89,485
Denmark..... bush.	9,527,032	7,075,254	—	334,711	173,357
..... \$	7,764,187	9,205,072	—	602,472	196,407
France..... bush.	2,560,014	1,533,183	1,369,962	6	190,537
..... \$	2,113,714	1,758,032	2,462,494	27	404,114
Italy..... bush.	400	1,156,664	2,196,321	—	—
..... \$	400	1,519,306	3,951,495	—	—
Netherlands..... bush.	5,705,625	7,923,706	46,004	100,168	423,600
..... \$	4,699,487	8,237,912	92,009	167,192	519,711
Sweden..... bush.	432,618	399,574	—	—	—
..... \$	351,928	462,577	—	—	—

<sup>1</sup> Ton equals 2,240 lb.

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Corn—concluded.					
Germany.....bush.	—	—	—	—	1,323,770
\$	—	—	—	—	1,633,161
United Kingdom.....bush.	5,627,128	24,493,817	15,658,493	948,493	2,706,895
\$	4,438,126	27,860,538	29,041,245	1,585,886	4,222,501
Canada.....bush.	6,568,407	15,724,838	13,228,954	6,542,025	10,064,668
\$	4,969,459	16,158,665	19,530,071	10,690,552	14,630,123
Mexico.....bush.	3,678,934	2,530,699	2,736,739	133,887	770,814
\$	3,083,408	3,133,896	5,739,810	246,746	928,967
Cuba.....bush.	3,231,323	2,819,278	1,074,099	1,964,540	1,893,793
\$	2,587,501	2,948,100	1,841,445	3,441,163	3,530,258
Other countries.....bush.	880,981	482,458	121,368	158,734	142,285
\$	768,486	622,335	239,404	282,855	298,958
<b>Total.....bush.</b>	<b>38,217,012</b>	<b>64,720,842</b>	<b>39,899,091</b>	<b>11,192,533</b>	<b>17,761,420</b>
\$	<b>30,780,887</b>	<b>72,497,204</b>	<b>69,269,329</b>	<b>18,624,386</b>	<b>26,453,681</b>
Corn-meal—					
United Kingdom.....bbl.	96,356	178,211	480,717	172,223	117,610
\$	373,921	1,025,579	5,161,275	1,449,389	975,177
Canada.....bbl.	67,036	61,472	128,758	20,812	44,667
\$	233,636	288,915	1,173,572	187,805	341,842
British West Indies.....bbl.	113,172	154,867	70,634	65,228	146,330
\$	435,858	858,940	696,008	537,016	1,245,356
Dutch West Indies.....bbl.	53,300	25,557	3,700	10,786	33,034
\$	211,987	135,472	36,798	91,405	288,084
Italy.....bbl.	6	1	220,661	283,228	1
\$	30	4	2,423,896	2,923,511	5
France.....bbl.	—	1,563	220,803	1,161	—
\$	—	8,233	2,443,522	9,180	—
Belgium.....bbl.	—	—	241,443	90,285	1,406
\$	—	—	2,378,235	758,883	13,449
Netherlands.....bbl.	3,139	330	54,120	239,096	25,614
\$	10,762	1,139	526,232	1,936,473	186,612
Switzerland.....bbl.	—	—	31,868	145,664	—
\$	—	—	332,671	1,426,922	—
Egypt.....bbl.	1	—	—	—	414,004
\$	4	—	—	—	3,678,963
Other countries.....bbl.	86,969	86,112	337,312	173,951	84,499
\$	335,060	439,042	3,588,894	1,599,903	748,910
<b>Total.....bbl.</b>	<b>419,979</b>	<b>508,113</b>	<b>1,790,016</b>	<b>1,202,434</b>	<b>867,165</b>
\$	<b>1,601,258</b>	<b>2,757,324</b>	<b>18,761,103</b>	<b>10,920,487</b>	<b>7,478,398</b>
Dried grain and malt sprouts, total.. ton <sup>1</sup>	<b>1,633</b>	<b>1,505</b>	<b>217</b>	<b>1,960</b>	<b>401</b>
\$	<b>47,448</b>	<b>47,809</b>	<b>13,394</b>	<b>125,886</b>	<b>23,949</b>
Oatmeal and rolled oats—					
Netherlands.....lb.	11,524,815	3,623,851	—	49,080,564	12,000,633
\$	298,300	116,049	—	2,382,325	594,490
Norway.....lb.	4,700,171	18,265,844	6,051,981	8,700,665	519,350
\$	136,324	700,986	395,386	410,467	25,568
United Kingdom.....lb.	28,626,849	69,086,773	255,585,340	73,954,909	30,670,797
\$	907,044	2,711,188	14,639,040	4,117,928	1,616,672
Other countries.....lb.	13,896,912	19,926,876	37,560,694	89,230,499	22,729,735
\$	543,954	962,931	2,318,654	5,088,662	1,654,616
<b>Total.....lb.</b>	<b>54,748,747</b>	<b>110,903,344</b>	<b>299,198,015</b>	<b>220,966,537</b>	<b>65,920,515</b>
\$	<b>1,885,622</b>	<b>4,191,154</b>	<b>17,353,080</b>	<b>11,999,382</b>	<b>3,891,346</b>
Oats—					
Belgium.....bush.	—	86,851	—	8,120,038	2,600,526
\$	—	68,000	—	6,678,566	2,556,026
France.....bush.	40,937,766	53,561,600	18,861,125	14,186,235	6,274,945
\$	20,977,863	32,258,495	16,977,337	11,626,830	6,187,025
Switzerland.....bush.	—	—	356,803	2,598,113	—
\$	—	—	331,835	2,042,303	—
Italy.....bush.	27,802,289	11,761,339	7,831,938	1,849,270	—
\$	13,819,165	7,108,222	6,837,538	1,643,220	—
Netherlands.....bush.	3,891,481	4,550,437	—	2,819,985	499,114
\$	1,848,038	2,699,830	—	2,318,083	460,626

<sup>1</sup> Ton=2,240 lb.



27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Wheat—					
Belgium..... bush.	2,682,919	2,698,044	12,628,186	24,476,490	20,665,729
France..... bush.	3,342,519	4,887,416	30,107,271	59,901,083	55,832,260
Germany..... bush.	21,802,818	16,253,262	6,386,134	27,590,718	26,444,984
Gibraltar..... bush.	27,898,643	31,698,762	14,675,271	66,552,585	72,370,900
Greece..... bush.	—	—	—	—	8,246,213
Italy..... bush.	—	—	—	—	22,511,012
Netherlands..... bush.	319,066	2,480,146	1,475,449	1,510,909	4,181,694
Norway..... bush.	357,270	4,318,783	3,481,796	3,574,010	10,813,188
Portugal..... bush.	11,686,691	4,811,158	—	96,225	1,415,360
Spain..... bush.	15,421,880	9,005,268	—	230,940	3,817,491
Sweden..... bush.	31,441,667	13,746,512	16,337,436	38,264,883	32,110,050
Switzerland..... bush.	38,191,428	26,743,498	38,263,712	91,054,928	85,356,226
United Kingdom..... bush.	21,070,335	19,127,675	2,236,354	1,962,249	11,912,662
Brazil..... bush.	26,224,787	37,946,031	5,770,866	4,848,540	32,678,644
Canada..... bush.	1,838,380	3,156,279	383,144	933	797,522
Other countries..... bush.	2,212,231	6,114,705	918,336	2,240	2,211,030
Peru..... bush.	1,863,212	600,980	460,066	988,427	1,287,465
Egypt..... bush.	2,276,493	1,576,600	1,104,149	2,372,223	3,337,669
British S. Africa..... bush.	7,041,608	851,550	110,550	138,133	7,099,430
French Africa..... bush.	8,468,909	1,454,474	258,687	370,000	18,562,652
Morocco..... bush.	4,786,497	5,385,480	—	—	1,012,835
Panama..... bush.	6,090,614	9,676,651	—	—	2,615,059
Other countries..... bush.	182,613	6,045,799	1,499,548	6,134,334	367,363
United Kingdom..... bush.	199,961	12,028,332	3,671,704	15,631,481	1,074,673
Canada..... bush.	53,550,376	67,976,120	43,146,559	44,818,552	77,368,545
Brazil..... bush.	67,388,601	139,429,196	100,848,344	107,503,619	215,241,377
Other countries..... bush.	6,244,732	4,714,836	26,493,421	1,421,613	14,811,672
Brazil..... bush.	7,430,824	9,856,529	61,464,108	3,314,818	41,280,833
Peru..... bush.	1,154,715	166	16,500	130	2,229,192
Egypt..... bush.	1,348,894	319	39,176	281	8,201,002
British S. Africa..... bush.	1,326,040	246,034	1	—	561,880
French Africa..... bush.	1,471,371	333,207	2	—	1,237,984
Morocco..... bush.	—	—	—	—	1,107,080
Panama..... bush.	—	—	—	—	3,438,796
Other countries..... bush.	389,978	5,058	—	28	599,887
United Kingdom..... bush.	454,975	6,887	—	60	1,660,203
Canada..... bush.	—	—	—	—	2,891,387
Brazil..... bush.	—	—	—	—	7,713,338
Other countries..... bush.	—	—	—	—	799,819
Panama..... bush.	—	—	—	—	2,225,456
Other countries..... bush.	599,604	96,607	43	34	713,044
United Kingdom..... bush.	588,658	201,904	150	224	1,755,920
Canada..... bush.	5,292,764	1,635,721	3,712	682,812	1,113,521
Brazil..... bush.	6,128,623	2,901,143	9,416	1,641,264	3,039,682
<b>Total..... bush.</b>	<b>173,274,015</b>	<b>149,831,427</b>	<b>111,177,103</b>	<b>148,086,470</b>	<b>218,287,334</b>
<b>Value..... \$</b>	<b>215,532,681</b>	<b>298,179,705</b>	<b>250,612,978</b>	<b>356,898,296</b>	<b>596,975,396</b>
Wheat flour—					
Belgium..... brl.	98,559	—	1,233,526	867,434	884,876
Denmark..... brl.	565,924	—	13,943,165	9,399,923	9,677,967
Finland..... brl.	286,205	168,405	43,044	140,854	37,715
Austria-Hungary..... brl.	1,717,925	1,366,495	470,753	1,584,563	434,929
France..... brl.	—	—	—	41,729	369,165
Germany..... brl.	—	—	—	499,124	4,256,109
Gibraltar..... brl.	—	—	—	263,497	1,155,680 <sup>1</sup>
Greece..... brl.	—	—	—	2,985,683	12,457,354 <sup>1</sup>
Italy..... brl.	2,886,757	1,429,128	5,015,150	4,718,188	273,840
Netherlands..... brl.	16,642,736	11,958,809	55,447,319	50,374,636	2,492,315
Norway..... brl.	—	—	—	42,324	1,077,675
Other countries..... brl.	—	—	—	467,957	11,856,373
Belgium..... brl.	152,777	7,359	224,604	1,312,677	51,823
Denmark..... brl.	922,102	39,455	2,428,851	14,105,753	619,372
Finland..... brl.	453,387	388,708	48,735	136,023	252,026
Austria-Hungary..... brl.	2,455,490	3,000,200	704,238	1,679,564	2,943,838
France..... brl.	1,074,319	987,686	2,929,005	3,006,825	1,410,243
Germany..... brl.	6,048,099	7,838,168	34,078,295	32,726,716	15,115,928
Gibraltar..... brl.	219,644	591,182	105,090	1,082,207	730,943
Greece..... brl.	1,818,349	4,087,784	1,284,629	12,795,766	8,636,848
Italy..... brl.	912,743	715,077	192,086	45,715	160,935
Netherlands..... brl.	5,377,349	5,626,941	2,329,363	493,535	1,797,301

<sup>1</sup>Austria only.



27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Wheat flour—concluded.					
Sweden..... brl.	95,043	21,883	49	32,217	140,091
\$	567,761	187,278	586	322,115	1,486,310
Switzerland..... brl.	—	55	577,851	204,270	11,577
\$	—	372	6,349,631	2,291,091	138,934
United Kingdom..... brl.	3,145,030	3,015,525	10,013,533	10,440,148	3,435,239
\$	17,532,505	21,947,731	113,037,706	115,699,430	37,203,126
British Honduras..... brl.	34,639	24,082	20,023	24,111	30,097
\$	200,632	195,340	234,755	287,661	376,874
Canada..... brl.	50,424	77,115	61,045	7,316	25,250
\$	254,717	580,326	621,523	80,154	277,585
Central Am. States..... brl.	522,857	511,884	39,464	423,165	418,101
\$	2,879,138	4,154,649	447,963	4,783,264	5,031,678
Mexico..... brl.	728,143	930,564	65,834	502,477	243,439
\$	4,135,632	7,543,254	728,274	5,639,847	2,862,183
Egypt..... brl.	35,458	1,072	81,355	1,094	1,046,978
\$	219,686	5,000	869,636	13,834	11,138,206
British W. Indies..... brl.	372,159	372,242	111,582	221,346	354,953
\$	2,108,267	3,003,576	1,245,682	2,332,141	3,888,746
Cuba..... brl.	1,124,562	1,016,675	541,564	1,408,698	1,389,990
\$	6,468,442	8,661,925	5,894,603	15,648,989	17,044,543
French W. Indies..... brl.	130,454	129,922	33,425	80,712	131,669
\$	740,494	1,082,102	393,531	913,801	1,607,460
Hayti..... brl.	221,455	127,458	378	268,243	361,321
\$	1,343,503	1,012,033	4,344	3,240,491	4,838,964
Other West Indies..... brl.	127,908	143,858	10,771	108,247	155,544
\$	793,449	1,246,137	131,080	1,304,426	2,014,166
Brazil..... brl.	734,726	301,614	596	279,564	623,198
\$	4,216,205	2,743,818	4,864	3,384,773	8,396,972
Chile..... brl.	493,403	79,997	20	200	2,527
\$	2,355,715	482,944	238	2,600	28,628
Venezuela..... brl.	171,758	146,812	530	124,893	165,895
\$	985,466	1,185,658	6,263	1,454,532	2,105,734
Poland and Danzig..... brl.	—	—	—	—	2,249,558
\$	—	—	—	—	24,505,724
Hong Kong..... brl.	356,263	61,800	—	10,597	192,936
\$	1,620,227	306,756	—	110,902	1,992,470
Japan..... brl.	54,475	4,083	—	2,528	107,024
\$	269,609	35,652	—	27,850	1,201,949
Philippine Islands..... brl.	385,371	76,089	22	54,904	143,469
\$	1,989,941	420,480	337	620,288	1,617,888
Other countries..... brl.	652,150	612,503	357,420	697,678	2,219,815
\$	3,608,442	4,485,591	3,995,793	8,181,339	26,425,969
<b>Total..... brl.</b>	<b>15,520,669</b>	<b>11,942,778</b>	<b>21,706,700</b>	<b>26,449,881</b>	<b>19,853,992</b>
<b>\$</b>	<b>87,337,805</b>	<b>93,198,474</b>	<b>244,653,422</b>	<b>293,452,748</b>	<b>224,472,448</b>
Eggs—					
United Kingdom..... doz.	8,255,909	4,359,192	5,493,717	15,626,519	4,311,216
\$	2,205,146	1,461,494	2,652,037	8,254,167	2,427,267
Canada..... doz.	7,916,534	10,850,678	2,959,157	9,243,677	7,078,137
\$	1,728,760	3,305,017	1,172,184	4,317,323	3,333,658
Cuba..... doz.	8,046,128	7,447,257	10,048,002	10,463,181	12,440,565
\$	1,660,745	2,045,344	3,606,957	4,607,199	6,347,594
Other countries..... doz.	2,177,635	2,269,297	2,437,402	3,456,093	3,011,854
\$	539,790	757,056	1,017,036	1,633,542	1,460,625
<b>Total..... doz.</b>	<b>26,396,206</b>	<b>24,926,424</b>	<b>20,938,278</b>	<b>38,789,470</b>	<b>26,841,772</b>
<b>\$</b>	<b>6,134,441</b>	<b>7,563,911</b>	<b>8,428,214</b>	<b>18,812,231</b>	<b>13,569,144</b>
Apples, dried—					
United Kingdom..... lb.	1,163,641	2,739,091	696,357	5,748,424	2,483,708
\$	82,747	213,953	87,322	755,058	323,686
Denmark..... lb.	2,316,126	941,210	190,700	3,512,038	893,514
\$	210,046	83,929	31,500	657,108	162,421
Norway..... lb.	575,274	233,651	156,470	2,283,759	169,200
\$	50,508	17,727	18,158	400,006	31,147
Netherlands..... lb.	1,878,251	187,286	—	490,503	1,283,225
\$	147,590	13,109	—	93,068	218,723

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.		June 30.		December 31.		
		1916.	1917.	1918.	1919.	1920.
Apples, dried—concluded.						
Sweden.....	lb.	6,859,064	1,146,625	185	7,809,782	1,479,766
	\$	584,186	80,161	45	1,296,930	316,182
Other countries.....	lb.	3,426,818	5,109,928	1,156,771	5,359,853	2,518,393
	\$	229,147	388,608	174,325	907,658	456,828
<b>Total.....</b>	lb.	<b>16,219,174</b>	<b>10,357,791</b>	<b>2,200,483</b>	<b>24,704,359</b>	<b>8,827,806</b>
	\$	<b>1,304,224</b>	<b>797,487</b>	<b>311,350</b>	<b>4,109,828</b>	<b>1,508,987</b>
Apples, green or ripe—						
Denmark.....	brl.	56,520	11,989	2,201	33,281	12,982
	\$	252,170	54,593	19,804	393,848	145,632
Sweden.....	brl.	8,787	3,573	—	34,950	14,432
	\$	43,940	25,898	—	457,119	156,052
Norway.....	brl.	25,323	20,410	667	147,586	67,434
	\$	113,128	104,642	7,950	1,697,143	778,026
United Kingdom.....	brl.	874,587	1,147,412	125,987	1,209,855	1,250,033
	\$	3,296,730	5,491,089	837,202	9,557,126	9,788,479
Canada.....	brl.	301,986	314,955	331,453	158,859	274,358
	\$	858,912	948,967	1,467,319	1,121,728	1,527,408
Argentina.....	brl.	44,003	58,453	4,704	15,159	32,688
	\$	244,449	413,432	43,159	207,822	374,070
Brazil.....	brl.	28,486	25,297	5,573	16,880	24,656
	\$	157,042	161,177	45,077	206,536	284,181
Australia.....	brl.	34,809	25,343	33	—	3,766
	\$	149,655	114,611	237	—	33,900
Other countries.....	brl.	91,820	132,565	109,298	95,797	117,362
	\$	402,746	664,887	714,455	829,960	1,000,985
<b>Total.....</b>	brl.	<b>1,456,321</b>	<b>1,739,997</b>	<b>579,916</b>	<b>1,712,367</b>	<b>1,797,711</b>
	\$	<b>5,518,772</b>	<b>7,979,236</b>	<b>3,135,203</b>	<b>14,471,282</b>	<b>14,088,733</b>
<b>Berries, total.....</b>	\$	<b>639,476</b>	<b>822,977</b>	<b>887,561</b>	<b>1,181,742</b>	<b>791,555</b>
Peaches, dried—						
United Kingdom.....	lb.	4,753,516	1,128,811	2,073,060	1,290,116	3,877,743
	\$	352,446	82,265	238,495	175,611	669,585
Canada.....	lb.	3,964,349	3,320,917	2,152,058	3,326,675	1,609,354
	\$	166,782	227,844	226,870	581,528	310,934
Other countries.....	lb.	5,021,477	3,737,860	614,480	4,405,543	2,437,734
	\$	374,359	295,811	79,090	802,734	483,090
<b>Total.....</b>	lb.	<b>13,739,342</b>	<b>8,178,588</b>	<b>4,839,598</b>	<b>9,022,334</b>	<b>7,924,831</b>
	\$	<b>894,587</b>	<b>505,620</b>	<b>544,455</b>	<b>1,559,873</b>	<b>1,465,609</b>
Pears—						
United Kingdom.....	\$	139,974	545,916	7,196	234,180	761,965
Canada.....	\$	241,156	432,180	748,676	1,141,222	909,370
Cuba.....	\$	84,385	98,349	114,544	191,431	205,608
Brazil.....	\$	123,855	126,340	25,857	85,074	191,275
Other countries.....	\$	102,362	153,474	32,568	112,764	133,903
<b>Total.....</b>	\$	<b>691,732</b>	<b>1,356,259</b>	<b>928,841</b>	<b>1,764,671</b>	<b>2,202,121</b>
Hay—						
France.....	ton <sup>1</sup>	101,893	41,084	—	—	—
	\$	1,862,352	810,194	—	—	—
United Kingdom.....	ton <sup>1</sup>	9,104	529	1,429	1,001	1,324
	\$	203,264	12,080	42,494	40,275	46,408
Canada.....	ton <sup>1</sup>	12,709	4,107	6,381	14,394	45,431
	\$	189,809	73,265	183,535	401,076	1,222,628
Mexico.....	ton <sup>1</sup>	20,635	26,070	6,859	6,793	11,282
	\$	329,176	484,114	185,613	147,068	326,184
Cuba.....	ton <sup>1</sup>	10,814	8,611	11,210	6,879	2,490
	\$	229,515	183,414	403,193	259,249	104,320
Australia.....	ton <sup>1</sup>	11,643	—	—	—	—
	\$	216,184	—	—	—	—
Philippine Islands.....	ton <sup>1</sup>	4,697	840	360	1,241	484
	\$	93,592	18,170	11,617	47,004	19,885
Other countries.....	ton <sup>1</sup>	6,841	4,288	2,103	1,834	2,143
	\$	143,136	104,599	77,578	68,303	77,971
<b>Total.....</b>	ton <sup>1</sup>	<b>178,336</b>	<b>85,529</b>	<b>28,342</b>	<b>32,142</b>	<b>63,154</b>
	\$	<b>3,267,028</b>	<b>1,685,836</b>	<b>904,030</b>	<b>962,975</b>	<b>1,797,396</b>

<sup>1</sup>Ton=2,240 lb.

**27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and the calendar years 1918, 1919 and 1920.—con.**

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
<b>Hides and skins, calf—</b>					
Canada..... lb.	1,563,924	1,332,399	2,188,293	4,340,084	956,148
\$	465,919	540,602	851,512	3,086,227	613,950
Other countries..... lb.	10,445	41,639	25,000	314,251	183,505
\$	3,718	8,857	15,000	131,398	65,748
<b>Total..... lb.</b>	<b>1,574,369</b>	<b>1,374,038</b>	<b>2,213,293</b>	<b>4,654,335</b>	<b>1,139,653</b>
\$	<b>469,637</b>	<b>549,459</b>	<b>866,512</b>	<b>3,217,625</b>	<b>679,698</b>
<b>Hides and skins, cattle—</b>					
France..... lb.	190,491	487,070	62,000	3,288,491	946,519
\$	42,077	114,500	20,300	838,207	148,199
Finland..... lb.	—	—	—	1,860,000	—
\$	—	—	—	742,140	—
Germany..... lb.	—	—	—	—	504,085
\$	—	—	—	—	226,451
Belgium..... lb.	—	—	—	1,064,278	741,228
\$	—	—	—	340,167	256,177
Italy..... lb.	—	—	51,020	328,550	115,700
\$	—	—	30,772	169,635	58,850
Netherlands..... lb.	285,492	713,167	—	1,133,017	216,587
\$	77,271	198,967	—	472,697	87,163
Canada..... lb.	10,283,069	4,376,575	1,599,216	6,559,849	5,641,545
\$	2,278,413	1,307,414	454,819	2,762,697	1,998,751
Japan..... lb.	1,742,877	1,350,123	273,361	1,232,270	1,949,232
\$	365,056	315,448	64,465	430,461	604,104
Other countries..... lb.	782,261	438,526	352,550	1,529,477	1,370,570
\$	176,108	105,028	111,595	534,352	381,447
<b>Total..... lb.</b>	<b>13,284,190</b>	<b>7,365,461</b>	<b>2,338,147</b>	<b>16,995,932</b>	<b>11,485,466</b>
\$	<b>2,938,925</b>	<b>2,041,357</b>	<b>681,951</b>	<b>6,290,356</b>	<b>3,761,142</b>
<b>Hides and skins, horse, total..... lb.</b>	<b>266,743</b>	<b>179,704</b>	<b>54,471</b>	<b>467,240</b>	<b>655,017</b>
\$	<b>34,481</b>	<b>32,900</b>	<b>13,864</b>	<b>135,176</b>	<b>142,706</b>
<b>Hides and skins, all other—</b>					
Canada..... lb.	1,345,753	707,578	374,406	824,599	645,883
\$	284,916	224,232	169,620	341,865	340,503
Other countries..... lb.	650,964	344,468	124,742	1,981,365	3,475,898
\$	147,292	122,883	45,873	910,299	1,278,837
<b>Total..... lb.</b>	<b>1,996,717</b>	<b>1,052,046</b>	<b>499,148</b>	<b>2,805,964</b>	<b>4,121,781</b>
\$	<b>432,208</b>	<b>347,115</b>	<b>215,493</b>	<b>1,252,164</b>	<b>1,619,340</b>
<b>Honey, total..... lb.</b>	<b>—</b>	<b>—</b>	<b>11,598,857</b>	<b>9,075,602</b>	<b>1,539,878</b>
\$	<b>252,487</b>	<b>736,139</b>	<b>2,223,396</b>	<b>1,955,091</b>	<b>265,352</b>
<b>Hops—</b>					
United Kingdom..... lb.	19,703,283	823,654	76,424	12,523,653	21,421,599
\$	3,900,893	101,939	13,014	5,324,596	14,386,054
Canada..... lb.	626,126	801,162	749,503	2,493,098	1,968,821
\$	95,259	121,614	151,795	1,143,269	1,103,767
France..... lb.	28,023	59,205	40,000	1,054,067	10,200
\$	6,050	12,861	20,000	444,969	2,550
Japan..... lb.	37,728	286,168	328,115	1,416,703	533,799
\$	5,320	43,222	86,195	734,786	375,551
Other countries..... lb.	2,014,658	2,854,687	2,476,310	3,309,983	1,689,636
\$	379,407	494,290	699,594	1,184,635	1,220,550
<b>Total..... lb.</b>	<b>22,409,818</b>	<b>4,824,876</b>	<b>3,670,352</b>	<b>20,797,504</b>	<b>25,624,055</b>
\$	<b>4,836,929</b>	<b>773,926</b>	<b>970,598</b>	<b>8,832,255</b>	<b>17,088,472</b>
<b>Meat Products—</b>					
<b>Beef, canned—</b>					
France..... lb.	6,508,241	17,653,357	39,791,821	1,837,883	27,367
\$	861,964	4,231,426	14,031,746	752,282	7,747
Italy..... lb.	1,967,935	187,634	47,675,117	15,405,107	512
\$	349,299	45,456	18,437,206	6,454,156	126
United Kingdom..... lb.	38,205,216	40,213,190	51,250,973	13,947,951	1,795,554
\$	7,546,162	9,960,653	18,068,783	5,255,462	693,605
Austria-Hungary..... lb.	—	—	—	2,407,790	—
\$	—	—	—	881,899	—

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Beef, canned—concluded.					
Poland and Danzig..... lb.	—	—	—	—	16,722,800
\$	—	—	—	—	3,443,677
Belgium..... lb.	—	—	244,848	6,471,198	703,447
\$	—	—	116,157	2,712,115	208,309
Germany..... lb.	450	—	—	2,128,219	144,133
\$	48	—	—	694,053	36,443
Netherlands..... lb.	—	—	—	2,016,928	362,342
\$	—	—	—	836,394	94,026
Sweden..... lb.	198,617	—	188	5,330,871	20,846
\$	28,857	—	72	1,545,636	7,462
Other countries..... lb.	4,023,306	9,476,944	2,494,216	4,121,380	3,989,027
\$	652,736	2,708,495	884,046	1,540,967	1,298,316
Total..... lb.	50,863,785	67,586,135	141,457,163	53,867,327	23,766,000
\$	9,439,066	16,916,030	51,498,010	20,672,364	5,789,711
Beef, fresh—					
France..... lb.	49,100,444	38,042,276	47,170,950	—	730,217
\$	5,436,020	4,883,959	9,410,674	—	141,285
Italy..... lb.	47,887,945	13,066,277	8,877,471	21,375,475	211,447
\$	6,340,028	1,569,318	1,715,353	4,621,058	40,682
United Kingdom..... lb.	117,400,488	123,887,168	144,000,885	54,171,002	5,300,488
\$	15,158,886	17,338,095	96,364,943	17,206,380	1,019,012
Bermuda..... lb.	885,046	1,326,911	929,837	823,456	1,183,243
\$	102,721	160,193	188,846	171,732	231,277
Canada..... lb.	3,192,196	17,771,159	10,390,596	2,621,011	2,330,963
\$	320,000	2,171,354	1,728,229	451,285	393,290
Panama..... lb.	1,504,593	235,034	357,366	51,950	86,537
\$	202,275	45,438	104,207	16,275	23,146
Egypt..... lb.	10,653,980	—	—	—	—
\$	1,252,217	—	—	—	—
Belgium..... lb.	—	360,272	105,000	23,469,602	35,205,492
\$	—	45,650	18,387	5,044,604	7,098,318
Germany..... lb.	—	—	—	31,083,572	26,159,680
\$	—	—	—	7,499,508	5,167,412
Netherlands..... lb.	—	—	—	13,708,452	15,922,196
\$	—	—	—	3,364,776	3,098,622
Sweden..... lb.	—	—	—	5,942,657	—
\$	—	—	—	1,469,841	—
Other countries..... lb.	580,318	687,649	429,524	2,277,192	2,117,885
\$	73,822	112,667	74,724	405,215	351,897
Total..... lb.	331,214,000	197,177,101	514,341,529	174,426,909	59,619,148
\$	23,885,999	26,277,271	103,605,363	40,380,747	17,564,887
Beef, pickled and other, cured—					
Belgium..... lb.	4,545,864	19,956,803	26,758,655	—	810,470
\$	454,584	2,022,259	4,508,276	—	147,302
Denmark..... lb.	919,994	30,000	—	—	—
\$	109,749	3,600	—	—	—
Germany..... lb.	400	—	—	—	—
\$	51	—	—	—	—
Norway..... lb.	1,316,434	2,604,065	—	—	—
\$	146,224	301,297	—	—	—
Netherlands..... lb.	65,888	4,086,621	—	—	—
\$	10,217	463,215	—	—	—
United Kingdom..... lb.	12,003,390	7,489,665	3,228,816	—	—
\$	1,429,897	1,063,334	755,069	—	—
Canada..... lb.	5,101,349	9,364,712	2,044,979	—	—
\$	480,680	1,177,374	358,092	—	—
Italy..... lb.	498,740	4,800	1,052,426	—	—
\$	57,675	684	158,514	—	—
Newfoundland and Labrador..... lb.	5,027,163	6,802,524	5,418,221	—	—
\$	465,498	834,354	944,444	—	—
British W. Indies..... lb.	2,241,972	1,652,345	944,830	—	—
\$	226,625	210,114	161,648	—	—
British Guiana..... lb.	1,090,532	1,146,700	564,685	—	—
\$	104,102	150,227	100,504	—	—



27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries		June 30.		December 31.		
		1916.	1917.	1918.	1919.	1920.
Beef, pickled, etc.—concluded.						
Dutch Guiana.....	lb.	938,367	749,490	672,200	404,200	1,227,584
	\$	91,749	96,124	133,279	83,203	166,765
Other countries.....	lb.	4,334,639	3,205,643	3,521,208	4,383,213	3,556,308
	\$	456,744	390,807	801,394	877,571	541,451
<b>Total.....</b>	lb.	<b>38,114,682</b>	<b>58,053,667</b>	<b>44,206,020</b>	<b>42,804,724</b>	<b>25,771,176</b>
	\$	<b>4,034,195</b>	<b>6,728,359</b>	<b>7,921,220</b>	<b>8,739,141</b>	<b>3,659,815</b>
Beef products—						
Oleo oil—						
Canada.....	lb.	37,338	475,952	5,409,619	1,377,794	2,048,289
	\$	5,233	85,137	1,307,061	375,638	481,796
Belgium.....	lb.	—	—	—	8,461,473	1,030,628
	\$	—	—	—	2,252,853	206,628
France.....	lb.	3,872,410	2,199,170	205,445	4,589,290	437,918
	\$	480,181	391,141	45,648	1,343,554	93,878
Greece.....	lb.	1,135,364	532,219	946,517	3,479,879	2,706,173
	\$	124,117	68,459	228,809	974,034	670,232
Switzerland.....	lb.	111,165	95,881	182,641	3,454,606	93,597
	\$	13,340	20,377	48,137	895,999	16,133
Denmark.....	lb.	6,614,373	2,764,095	30,000	8,025,918	1,531,297
	\$	790,640	430,716	6,225	2,427,011	321,766
Germany.....	lb.	—	—	—	2,126,704	3,428,958
	\$	—	—	—	688,209	715,479
Netherlands.....	lb.	29,762,451	8,081,795	—	4,811,612	20,107,202
	\$	3,558,189	1,201,373	—	1,367,792	4,390,570
Norway.....	lb.	14,062,716	15,907,144	—	8,656,192	10,566,827
	\$	1,796,590	2,745,117	—	2,620,902	2,389,285
Sweden.....	lb.	9,234,361	2,247,553	2,240,000	3,494,255	3,320,805
	\$	1,180,544	310,078	500,000	1,113,896	755,460
United Kingdom.....	lb.	30,657,569	31,761,124	57,783,111	20,791,549	17,593,177
	\$	3,684,779	5,316,644	12,782,449	6,113,654	3,913,808
Newfoundland and Labrador...	lb.	1,896,196	1,761,149	2,081,016	1,890,493	1,475,586
	\$	230,463	294,394	520,516	547,878	331,710
Turkey in Europe.....	lb.	—	—	—	2,635,801	6,801,573
	\$	—	—	—	800,803	1,556,259
Turkey in Asia.....	lb.	—	—	—	395,088	2,160,125
	\$	—	—	—	123,883	512,926
Other countries.....	lb.	5,261,971	1,284,029	228,001	1,394,510	1,066,189
	\$	605,039	201,583	54,476	379,234	229,279
<b>Total.....</b>	lb.	<b>102,645,914</b>	<b>67,110,111</b>	<b>69,106,350</b>	<b>75,585,164</b>	<b>74,368,344</b>
	\$	<b>12,469,115</b>	<b>11,065,019</b>	<b>15,493,321</b>	<b>22,025,340</b>	<b>16,585,209</b>
Oleomargarine, imitation butter,						
<b>total.....</b>	lb.	<b>5,426,221</b>	<b>5,651,267</b>	<b>8,909,108</b>	<b>22,939,589</b>	<b>16,557,746</b>
	\$	<b>640,480</b>	<b>901,659</b>	<b>2,398,908</b>	<b>6,576,760</b>	<b>4,567,120</b>
Beef tallow—						
Belgium.....	lb.	—	—	—	5,478,257	444,200
	\$	—	—	—	912,091	79,402
France.....	lb.	934,795	1,519,426	2,276,518	10,603,756	998,152
	\$	92,226	223,263	407,502	1,787,882	177,394
Netherlands.....	lb.	320,267	—	—	5,006,612	2,492,308
	\$	27,585	—	—	1,056,305	454,140
Italy.....	lb.	4,652,446	1,688,719	133,604	46,344	378,368
	\$	390,588	192,686	23,382	8,510	52,724
United Kingdom.....	lb.	1,257,370	157,171	23,170	4,663,847	6,308,446
	\$	102,281	17,831	3,885	667,394	782,788
Cuba.....	lb.	875,491	1,223,622	975,143	1,983,768	2,498,912
	\$	58,112	134,300	158,711	241,018	329,498
Sweden.....	lb.	980,880	418,067	—	4,573,884	71,860
	\$	78,990	53,203	—	739,932	13,003
Other countries.....	lb.	7,267,494	10,202,364	814,222	5,997,315	7,499,392
	\$	576,690	1,179,626	152,947	956,980	1,061,726
<b>Total.....</b>	lb.	<b>16,288,743</b>	<b>15,209,369</b>	<b>4,222,657</b>	<b>38,953,783</b>	<b>20,691,638</b>
	\$	<b>1,326,472</b>	<b>1,800,909</b>	<b>745,977</b>	<b>6,370,112</b>	<b>2,950,675</b>

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Bacon—					
Austria-Hungary..... lb.	—	—	—	10,368,245	2,929,787 <sup>1</sup>
\$	—	—	—	3,296,885	621,358 <sup>1</sup>
Belgium..... lb.	60,160,749	65,219,598	67,444,015	90,823,427	35,086,345
\$	6,251,526	8,508,658	18,909,533	28,040,950	7,252,773
Denmark..... lb.	6,865,217	58,990	—	39,039,883	6,642,344
\$	945,743	8,262	—	11,955,295	1,394,863
France..... lb.	52,501,448	77,035,622	98,496,402	178,431,224	25,040,866
\$	6,442,595	12,062,419	27,131,653	50,462,536	5,850,881
Germany..... lb.	—	—	—	53,449,694	76,035,297
\$	—	—	—	17,370,068	17,112,675
Gibraltar..... lb.	1,437,721	539,108	—	5,529,931	777,175
\$	203,657	66,910	—	1,725,421	158,771
Italy..... lb.	10,532,169	19,378,346	98,079,060	48,128,149	18,844,911
\$	1,435,795	3,514,652	25,678,054	14,899,875	3,840,134
Netherlands..... lb.	12,846,176	10,625,101	—	112,028,898	61,759,267
\$	1,632,399	1,501,376	—	32,836,052	13,046,478
Norway..... lb.	22,386,900	8,296,500	—	26,152,222	6,760,290
\$	3,086,960	1,460,095	—	8,200,421	1,558,071
Finland..... lb.	—	—	—	13,700,781	582,125
\$	—	—	—	4,236,090	109,308
Sweden..... lb.	14,906,277	1,065,440	1,680,601	51,891,124	17,410,673
\$	2,015,978	192,169	345,319	16,286,475	3,919,127
United Kingdom..... lb.	339,341,069	346,758,407	789,253,478	507,184,219	344,553,582
\$	48,740,987	65,192,174	229,883,046	167,505,052	92,403,339
Canada..... lb.	39,590,591	118,709,847	24,454,474	34,253,197	12,473,768
\$	5,342,490	21,366,115	7,465,376	10,767,992	2,933,683
Cuba..... lb.	13,543,082	14,914,902	16,101,208	15,956,981	21,190,518
\$	1,685,946	2,533,943	4,449,579	4,179,328	4,378,657
Other countries..... lb.	5,697,387	4,550,111	9,278,843	3,359,519	6,586,224
\$	831,540	814,895	2,105,504	1,150,787	1,716,790
<b>Total..... lb.</b>	<b>579,808,786</b>	<b>667,151,972</b>	<b>1,104,788,081</b>	<b>1,190,297,494</b>	<b>636,675,572</b>
<b>                                  \$</b>	<b>78,615,616</b>	<b>117,221,668</b>	<b>315,968,064</b>	<b>373,913,227</b>	<b>156,296,908</b>
Hams and shoulders, cured—					
Belgium..... lb.	2,792,605	—	5,853,423	30,054,740	6,596,959
\$	367,070	—	1,387,335	8,899,197	1,390,308
France..... lb.	7,897,523	25,863,824	30,336,829	103,201,727	26,209,164
\$	1,231,501	4,226,651	7,829,576	31,447,698	6,900,327
Netherlands..... lb.	570,235	547	—	8,569,661	1,589,470
\$	99,846	111	—	2,707,214	402,418
United Kingdom..... lb.	251,025,755	217,434,561	470,415,228	338,028,382	116,256,553
\$	35,899,072	40,801,138	127,586,544	109,685,518	31,691,150
Canada..... lb.	2,673,658	5,617,090	11,112,784	7,457,307	6,354,128
\$	370,783	1,021,892	3,098,318	2,191,013	1,526,333
Panama..... lb.	976,051	629,807	109,670	270,746	345,113
\$	152,842	132,332	34,855	103,877	128,836
Cuba..... lb.	11,493,464	9,867,826	8,707,061	9,863,103	15,612,342
\$	1,875,091	1,880,230	2,512,966	3,112,929	5,033,220
Austria-Hungary..... lb.	—	—	—	1,935,863	794,376 <sup>1</sup>
\$	—	—	—	650,879	170,390 <sup>1</sup>
Denmark..... lb.	29,566	—	—	5,282,356	37,822
\$	5,044	—	—	1,718,850	9,669
Germany..... lb.	—	—	—	7,626,584	2,145,129
\$	—	—	—	2,420,958	625,331
Gibraltar..... lb.	13,712	1,354	—	6,010,496	12,523
\$	2,074	297	—	2,028,599	4,789
Italy..... lb.	27,713	387,277	7,102,044	65,245,793	3,236,225
\$	4,150	84,479	2,078,892	20,080,683	801,498
Norway..... lb.	370,742	1,359,854	48	4,358,920	247,502
\$	52,868	254,010	17	1,382,235	55,711
Sweden..... lb.	34,645	—	603	2,820,714	87,642
\$	4,929	—	257	940,297	24,037
Other countries..... lb.	4,302,942	5,494,441	3,575,351	6,069,271	5,721,807
\$	737,752	1,172,901	1,146,128	2,058,890	2,123,571
<b>Total..... lb.</b>	<b>282,208,611</b>	<b>286,656,581</b>	<b>537,213,041</b>	<b>596,795,663</b>	<b>185,246,755</b>
<b>                                  \$</b>	<b>40,803,022</b>	<b>49,574,041</b>	<b>145,674,888</b>	<b>189,428,837</b>	<b>50,887,588</b>

<sup>1</sup>Austria only.

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Lard—					
Belgium..... lb.	70,132,156	96,761,185	116,784,152	155,802,228	55,021,415
\$	7,327,075	13,815,450	31,757,653	46,338,651	12,917,017
Denmark..... lb.	2,874,017	841,110	75,000	33,505,333	6,329,275
\$	293,333	156,441	20,000	11,051,160	1,429,018
France..... lb.	42,282,883	54,867,832	35,841,676	96,296,935	48,755,791
\$	5,075,237	10,712,463	9,349,535	27,958,403	13,335,794
Austria-Hungary..... lb.	—	—	—	15,184,232	2,919,490 <sup>1</sup>
\$	—	—	—	5,206,527	674,692 <sup>1</sup>
Finland..... lb.	—	—	—	2,771,503	462,524
\$	—	—	—	938,594	125,898
Gibraltar..... lb.	236,760	115,975	—	3,867,419	197,122
\$	28,682	21,545	—	1,179,864	50,618
Switzerland..... lb.	160,000	—	12,609,344	32,247,743	1,912,574
\$	21,360	—	3,898,760	10,245,235	454,567
Germany..... lb.	—	—	—	39,495,017	127,836,008
\$	—	—	—	13,990,079	28,785,385
Italy..... lb.	3,487,719	4,981,846	1,145,112	2,463,197	23,153,676
\$	390,806	1,058,998	273,258	806,057	5,334,923
Netherlands..... lb.	13,281,671	20,446,110	—	68,596,924	91,297,867
\$	1,467,341	2,838,460	—	22,377,490	21,212,245
Norway..... lb.	1,473,199	1,888,539	1,020	1,257,190	1,018,106
\$	168,656	327,776	275	393,627	262,125
Sweden..... lb.	2,324,407	260,170	560,295	24,483,937	5,000,274
\$	251,881	38,429	174,098	8,645,694	1,177,049
United Kingdom..... lb.	192,075,591	178,110,633	309,987,044	219,306,542	128,771,843
\$	21,640,498	32,616,134	78,985,740	68,323,623	29,002,972
Canada..... lb.	6,330,140	5,375,768	2,478,926	5,000,459	12,730,298
\$	635,024	984,930	669,571	1,454,658	2,630,226
Central American States..... lb.	5,510,876	2,658,120	334,889	227,169	861,422
\$	610,323	453,596	95,559	72,605	209,192
Mexico..... lb.	8,736,712	13,261,559	15,452,095	7,134,448	17,302,006
\$	966,395	2,270,025	4,451,219	2,127,709	4,000,496
Cuba..... lb.	53,811,784	48,732,924	46,008,414	44,766,460	65,720,975
\$	5,930,069	8,819,512	13,044,755	14,111,770	15,907,936
Ecuador..... lb.	3,716,378	3,842,692	1,339,946	2,407,180	2,897,992
\$	425,405	686,141	418,727	824,444	680,464
Other countries..... lb.	20,577,045	12,525,077	6,200,988	5,997,695	20,061,293
\$	2,402,291	2,208,963	793,996	1,937,259	5,180,824
<b>Total..... lb.</b>	<b>427,011,338</b>	<b>444,769,540</b>	<b>548,817,901</b>	<b>760,901,611</b>	<b>612,249,951</b>
<b>                  \$</b>	<b>47,634,376</b>	<b>77,008,913</b>	<b>144,933,151</b>	<b>237,983,449</b>	<b>143,371,441</b>
Lard, neutral—					
Denmark..... lb.	2,078,710	1,022,499	—	5,445,681	497,480
\$	238,988	171,136	—	1,781,589	119,197
Germany..... lb.	—	—	—	950,837	118,584
\$	—	—	—	367,789	37,610
Netherlands..... lb.	9,059,503	2,657,914	—	9,313,883	2,998,410
\$	1,152,882	432,566	—	3,169,227	755,581
Norway..... lb.	2,222,742	3,234,094	—	1,653,325	1,885,917
\$	269,909	594,283	—	541,719	504,596
Sweden..... lb.	1,365,257	275,423	—	1,472,806	1,064,260
\$	169,431	40,935	—	470,401	297,730
United Kingdom..... lb.	12,114,029	8,627,547	5,433,851	2,000,074	14,255,712
\$	1,419,691	1,615,051	1,364,634	715,891	3,486,755
Other countries..... lb.	7,586,349	1,758,763	873,313	2,120,531	2,417,708
\$	795,495	314,118	248,146	678,767	604,573
<b>Total..... lb.</b>	<b>34,426,590</b>	<b>17,576,240</b>	<b>6,307,164</b>	<b>22,957,137</b>	<b>23,238,071</b>
<b>                  \$</b>	<b>4,046,397</b>	<b>3,168,089</b>	<b>1,612,780</b>	<b>7,725,983</b>	<b>5,806,042</b>
Pork, canned—					
France..... lb.	644,780	1,103,011	2,312,844	1,011,205	98,649
\$	117,700	304,305	632,565	372,424	25,617
United Kingdom..... lb.	7,842,565	3,354,628	1,994,851	3,068,054	1,209,065
\$	1,488,344	1,003,834	787,892	1,461,563	580,953
Other countries..... lb.	1,123,387	1,438,487	959,647	1,712,447	494,527
\$	209,542	337,466	355,935	588,377	145,550
<b>Total..... lb.</b>	<b>9,610,732</b>	<b>5,896,126</b>	<b>5,267,342</b>	<b>5,791,706</b>	<b>1,802,241</b>
<b>                  \$</b>	<b>1,815,586</b>	<b>1,645,695</b>	<b>1,776,392</b>	<b>2,422,364</b>	<b>752,120</b>

<sup>1</sup>Austria only.

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.		June 30.		December 31.		
		1916.	1917.	1918.	1919.	1920.
<b>Pork, fresh—</b>						
France.....	lb.	2,270,173	919,724	433,301	2,019,460	1,280,610
	\$	260,756	120,397	120,541	749,455	322,204
United Kingdom.....	lb.	26,402,608	23,787,556	9,500,417	1,197,244	19,404,504
	\$	3,237,682	3,649,482	2,412,536	267,000	4,627,126
Canada.....	lb.	32,962,200	24,832,551	1,084,932	21,905,577	12,717,549
	\$	3,824,831	4,944,891	222,969	6,897,596	2,797,146
Other countries.....	lb.	1,370,543	895,804	613,985	1,654,697	4,902,573
	\$	200,139	161,119	151,848	433,506	1,343,987
<b>Total.....</b>	lb.	<b>63,005,524</b>	<b>50,435,615</b>	<b>11,632,635</b>	<b>26,776,978</b>	<b>38,305,236</b>
	\$	<b>7,523,498</b>	<b>8,875,889</b>	<b>2,907,894</b>	<b>8,347,557</b>	<b>9,090,463</b>
<b>Pork, pickled—</b>						
France.....	lb.	1,550,777	829,354	302,254	605,398	660,187
	\$	182,973	126,465	76,012	140,585	134,555
United Kingdom.....	lb.	13,124,077	6,058,672	2,102,744	3,378,871	1,902,869
	\$	1,644,441	929,881	616,636	963,487	410,054
Canada.....	lb.	17,835,273	16,929,411	14,708,735	8,372,796	15,480,971
	\$	1,701,324	2,501,890	3,355,902	2,179,707	3,032,780
Newfoundland and Labrador.....	lb.	7,070,090	6,262,085	6,303,799	4,833,214	4,848,954
	\$	651,794	907,594	1,284,733	1,089,045	952,980
British West Indies.....	lb.	4,410,549	3,542,166	1,887,313	1,026,405	2,251,061
	\$	463,604	513,271	438,819	261,074	433,955
Cuba.....	lb.	7,846,918	7,700,421	7,659,439	6,560,984	4,775,388
	\$	888,699	1,145,958	1,893,101	1,702,245	1,082,474
British Guiana.....	lb.	877,977	1,083,300	1,040,430	205,700	901,185
	\$	91,806	164,997	237,410	46,324	180,715
Belgium.....	lb.	1,014,309	163,121	25,295	1,496,050	616,760
	\$	101,428	23,878	5,439	337,786	114,991
Norway.....	lb.	824,624	324,556	200	3,193,955	616,062
	\$	91,686	49,485	50	816,452	138,875
Netherlands.....	lb.	38,288	—	—	1,345,353	1,224,444
	\$	4,200	—	—	271,052	169,552
Other countries.....	lb.	8,867,831	4,099,635	2,641,451	3,095,149	5,430,960
	\$	930,401	577,887	626,915	824,761	1,019,093
<b>Total.....</b>	lb.	<b>63,460,743</b>	<b>45,992,721</b>	<b>36,671,660</b>	<b>34,113,875</b>	<b>38,708,841</b>
	\$	<b>6,752,356</b>	<b>6,941,306</b>	<b>8,535,017</b>	<b>8,632,518</b>	<b>7,670,024</b>
<b>Lard compounds, etc.—</b>						
Norway.....	lb.	1,482,211	1,360,285	—	2,703,928	1,484,598
	\$	151,929	244,069	—	728,050	300,932
United Kingdom.....	lb.	18,486,477	13,507,936	4,345,867	62,739,201	4,008,562
	\$	1,811,903	1,947,989	995,934	15,795,065	790,657
Cuba.....	lb.	11,895,200	14,164,676	8,608,423	8,611,137	6,918,040
	\$	1,141,470	2,203,477	2,054,469	2,333,358	1,601,336
Panama.....	lb.	2,203,495	2,190,320	353,087	414,197	450,309
	\$	218,141	304,051	84,090	112,630	105,259
Hayti.....	lb.	1,811,814	1,498,965	223,780	1,603,608	2,126,471
	\$	208,848	246,101	59,773	432,763	564,451
Philippine Islands.....	lb.	1,583,880	375,925	257,099	247,033	341,133
	\$	151,177	60,326	68,975	69,380	97,325
Mexico.....	lb.	4,597,585	6,863,487	6,886,888	4,620,050	6,217,160
	\$	417,006	1,011,210	1,654,381	1,230,234	1,328,533
Belgium.....	lb.	—	5,809,610	14,379,164	22,644,891	451,510
	\$	—	723,877	3,347,502	5,300,526	149,218
Gibraltar.....	lb.	8,400	2,810	—	9,319,915	8,400
	\$	1,246	408	—	2,318,564	2,310
British West Indies.....	lb.	3,380,556	3,863,594	2,187,574	2,727,296	2,932,641
	\$	326,388	558,138	536,632	708,582	683,685
Other countries.....	lb.	7,393,683	6,721,885	6,735,528	9,331,694	7,112,634
	\$	719,326	970,207	1,456,780	2,576,733	1,595,169
<b>Total.....</b>	lb.	<b>52,843,311</b>	<b>56,359,493</b>	<b>43,977,410</b>	<b>124,962,950</b>	<b>32,051,458</b>
	\$	<b>5,147,434</b>	<b>8,269,844</b>	<b>10,258,536</b>	<b>31,605,885</b>	<b>7,218,845</b>



27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.		June 30.		December 31.		
		1916.	1917.	1918.	1919.	1920.
Mutton—						
United Kingdom.....	lb.	2,109,031	177,443	87,744	24,122	176,326
	\$	259,993	25,739	22,967	8,697	40,179
Canada.....	lb.	2,925,052	2,449,497	1,368,497	2,594,402	1,818,988
	\$	366,739	351,293	319,568	529,050	395,593
Other countries.....	lb.	518,835	568,636	174,574	390,640	1,580,095
	\$	70,150	104,494	44,597	94,920	322,754
<b>Total.....</b>	<b>lb.</b>	<b>5,552,918</b>	<b>3,195,576</b>	<b>1,630,815</b>	<b>3,009,164</b>	<b>3,575,409</b>
	<b>\$</b>	<b>696,882</b>	<b>481,526</b>	<b>387,132</b>	<b>632,667</b>	<b>758,526</b>
Poultry and game—						
United Kingdom.....	\$	1,381,590	1,134,206	790,091	4,328,896	444,299
	\$	41,152	73,097	19,589	47,914	11,164
Canada.....	\$	138,656	120,045	125,368	183,468	301,285
Other countries.....	\$					
<b>Total.....</b>	<b>\$</b>	<b>1,561,398</b>	<b>1,327,348</b>	<b>935,048</b>	<b>4,560,278</b>	<b>756,748</b>
Sausages, canned—						
France.....	lb.	1,989,735	622,725	86,272	1,409,553	769,544
	\$	445,207	155,943	26,044	646,912	327,197
Italy.....	lb.	1,951,409	—	44,213	200	49,533
	\$	383,090	—	14,131	110	26,445
United Kingdom.....	lb.	178,713	1,516,008	2,666,046	2,267,506	120,061
	\$	24,430	358,971	719,574	740,076	39,134
Cuba.....	lb.	2,085,218	3,052,056	2,419,947	2,437,961	4,200,420
	\$	317,924	549,803	686,926	662,910	1,295,699
Other countries.....	lb.	1,618,010	1,104,161	1,133,124	2,083,116	2,018,733
	\$	99,215	251,603	370,524	711,936	656,209
<b>Total.....</b>	<b>lb.</b>	<b>6,823,085</b>	<b>6,294,950</b>	<b>6,349,602</b>	<b>8,198,336</b>	<b>7,158,291</b>
	<b>\$</b>	<b>1,269,866</b>	<b>1,316,320</b>	<b>1,817,199</b>	<b>2,761,944</b>	<b>2,344,534</b>
Sausage, all other—						
Belgium.....	lb.	—	—	—	1,784,024	611,910
	\$	—	—	—	737,628	214,550
France.....	lb.	4,540,163	5,785,905	3,619,171	7,744,982	4,743,643
	\$	1,035,512	1,685,424	1,324,069	3,468,765	1,969,405
Canada.....	lb.	451,214	589,115	240,867	332,856	272,634
	\$	95,879	145,835	87,707	133,052	97,867
Cuba.....	lb.	2,074,014	984,724	1,466,584	1,219,154	2,959,714
	\$	335,394	210,430	491,042	475,983	1,178,823
Other countries.....	lb.	1,524,845	1,774,727	702,732	2,808,219	1,921,194
	\$	265,446	399,821	222,555	1,096,422	726,929
<b>Total.....</b>	<b>lb.</b>	<b>8,590,236</b>	<b>9,134,471</b>	<b>6,029,354</b>	<b>13,889,285</b>	<b>10,509,095</b>
	<b>\$</b>	<b>1,732,231</b>	<b>2,441,510</b>	<b>2,125,373</b>	<b>5,911,850</b>	<b>4,187,574</b>
Sausage casings—						
Belgium.....	lb.	—	—	—	1,177,174	921,597
	\$	—	—	—	213,800	132,688
Canada.....	lb.	149,763	340,067	847,724	1,262,494	300,528
	\$	51,260	190,317	572,294	450,205	223,271
Switzerland.....	lb.	18,989	—	85,704	630,394	141,833
	\$	5,332	—	79,023	203,894	42,293
Denmark.....	lb.	1,236,063	14,960	—	2,195,758	972,360
	\$	233,394	2,992	—	257,983	154,108
France.....	lb.	1,158,827	1,993,491	288,503	1,503,512	1,172,235
	\$	240,301	557,465	121,226	505,763	238,688
Germany.....	lb.	—	—	—	4,484,173	8,462,441
	\$	—	—	—	506,125	953,852
Netherlands.....	lb.	1,747,011	2,695	—	5,641,052	4,566,985
	\$	271,118	1,291	—	659,067	423,802
Spain.....	lb.	1,941,600	1,605,435	704,830	2,410,091	2,325,917
	\$	234,577	249,818	284,929	452,898	479,287
Sweden.....	lb.	2,342,442	27,500	—	912,238	603,118
	\$	395,488	4,745	—	93,059	81,055
United Kingdom.....	lb.	4,211,261	590,871	1,040,290	3,396,378	2,489,453
	\$	1,038,442	194,768	945,714	2,821,196	1,669,582
Australia.....	lb.	842,472	812,098	605,593	314,820	1,026,690
	\$	208,435	311,170	373,456	267,091	697,801

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.		June 30.		December 31.		
		1916.	1917.	1918.	1919.	1920.
Sausage casings—concluded.						
New Zealand.....	lb.	293,262	279,388	186,783	141,889	569,813
	\$	78,677	119,898	124,092	135,481	363,661
Other countries.....	lb.	767,203	451,555	277,894	407,055	1,685,217
	\$	110,657	109,495	110,946	243,273	400,847
<b>Total.....</b>	lb.	<b>14,708,893</b>	<b>6,118,060</b>	<b>4,037,391</b>	<b>25,477,028</b>	<b>25,238,187</b>
	\$	<b>2,867,681</b>	<b>1,741,959</b>	<b>2,611,680</b>	<b>6,809,834</b>	<b>5,860,935</b>
Stearine from animal fats—						
Belgium.....	lb.	21,727	—	—	2,111,081	509,623
	\$	3,476	—	—	278,537	83,159
Denmark.....	lb.	—	568,202	—	1,413,474	155,442
	\$	—	89,614	—	287,634	30,410
France.....	lb.	427,344	1,549,911	63,791	3,007,986	320,600
	\$	41,710	215,817	13,893	540,507	52,720
Netherlands.....	lb.	2,890,201	77,571	—	3,197,273	3,366,512
	\$	304,163	9,622	—	612,331	546,692
United Kingdom.....	lb.	1,725,922	1,755,909	866,448	3,907,895	1,410,672
	\$	196,239	242,192	173,048	810,694	257,103
Canada.....	lb.	1,638,244	2,349,021	2,917,406	1,020,773	3,500,969
	\$	164,345	317,582	542,470	209,825	573,288
Cuba.....	lb.	1,553,678	1,639,684	1,766,199	1,213,865	2,131,584
	\$	178,350	241,110	380,005	254,002	420,907
Other countries.....	lb.	4,805,131	4,996,059	4,936,397	4,982,277	6,117,576
	\$	573,378	682,380	1,181,744	1,177,621	1,523,299
<b>Total.....</b>	lb.	<b>13,062,247</b>	<b>12,936,357</b>	<b>10,550,241</b>	<b>20,854,724</b>	<b>17,512,978</b>
	\$	<b>1,461,661</b>	<b>1,798,317</b>	<b>2,291,160</b>	<b>4,171,151</b>	<b>3,487,578</b>
All other meat products, canned—						
Belgium.....	\$	6,582	—	17,265	578,720	16,684
France.....	\$	214,802	691,438	1,531,396	1,944,271	24,002
Italy.....	\$	1,101,928	58,370	2,943,356	1,118,294	1,616
United Kingdom.....	\$	920,182	2,531,862	3,557,096	7,729,010	4,628,383
Canada.....	\$	98,677	399,203	112,137	187,920	135,089
Other countries.....	\$	492,833	639,779	658,746	1,392,454	1,674,502
<b>Total.....</b>	\$	<b>2,835,005</b>	<b>4,320,652</b>	<b>8,819,996</b>	<b>12,950,669</b>	<b>6,480,276</b>
All other meat products—						
France.....	\$	195,668	197,287	1,432,273	1,598,498	241,126
Italy.....	\$	311,235	35,081	313,274	1,410,235	49,917
United Kingdom.....	\$	3,171,417	2,124,183	3,455,205	4,104,343	1,999,281
Canada.....	\$	194,357	702,151	388,410	626,817	517,448
Panama.....	\$	149,570	74,188	60,707	126,500	112,165
Belgium.....	\$	352,928	—	10,166	385,749	40,701
Denmark.....	\$	110,047	7,365	—	221,668	408,814
Germany.....	\$	—	—	—	218,764	1,211,024
Gibraltar.....	\$	42,104	51,306	—	399,903	42,702
Netherlands.....	\$	11	6,159	—	424,472	1,152,364
Sweden.....	\$	13,264	—	—	981,141	35,967
Other countries.....	\$	543,261	762,852	1,283,657	1,244,522	1,358,080
<b>Total.....</b>	\$	<b>5,083,882</b>	<b>3,960,572</b>	<b>6,943,692</b>	<b>11,642,612</b>	<b>7,169,689</b>
Butter—						
United Kingdom.....	lb.	5,433,282	20,839,583	22,250,115	21,817,613	3,898,845
	\$	1,441,094	6,705,608	9,105,373	10,682,229	2,175,922
Bermuda.....	lb.	262,046	325,829	144,626	52,693	48,137
	\$	80,619	112,602	60,259	27,543	28,357
Canada.....	lb.	2,013,392	1,323,653	12,518	274,893	855,150
	\$	503,696	425,314	5,110	160,802	505,443
Panama.....	lb.	621,527	573,580	422,334	471,812	565,274
	\$	185,612	214,683	216,156	284,589	355,919
Hayti.....	lb.	426,200	443,430	423,530	364,410	552,700
	\$	81,815	105,660	140,308	153,737	216,427

**27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.**

Exports by Countries.		June 30.		December 31.		
		1916.	1917.	1918.	1919.	1920.
Butter—concluded.						
Mexico.....	lb.	167,395	558,369	313,615	429,608	798,596
	\$	50,493	208,254	166,501	273,205	555,124
Netherlands.....	lb.	—	—	—	481,538	319,666
	\$	—	—	—	250,492	179,878
Belgium.....	lb.	—	—	40,000	2,856,293	5,214,778
	\$	—	—	27,800	1,481,416	3,030,979
Denmark.....	lb.	232,905	—	—	1,033,096	2,558
	\$	59,934	—	—	505,546	835
France.....	lb.	141	88,802	79,948	778,154	701,042
	\$	40	39,129	41,070	437,940	413,223
Norway.....	lb.	62,435	21,000	4,824	1,367,982	450
	\$	19,819	5,000	2,787	629,119	225
Australia.....	lb.	1,641,080	34,000	—	—	—
	\$	481,323	9,180	—	—	—
Italy.....	lb.	—	2,606	57,777	1,075,128	220,650
	\$	—	1,202	28,481	569,918	152,252
Other countries.....	lb.	2,627,078	2,624,240	2,445,128	3,553,265	4,309,889
	\$	685,660	922,538	1,075,108	2,047,910	2,527,819
<b>Total.....</b>	<b>lb.</b>	<b>13,487,481</b>	<b>26,835,092</b>	<b>26,194,415</b>	<b>34,556,485</b>	<b>17,487,735</b>
	<b>\$</b>	<b>3,590,105</b>	<b>8,749,170</b>	<b>10,868,953</b>	<b>17,504,446</b>	<b>10,142,403</b>
Cheese—						
United Kingdom.....	lb.	38,077,657	55,399,101	38,967,953	585,823	5,233,407
	\$	6,318,598	12,820,197	8,815,236	163,578	1,138,132
Canada.....	lb.	2,566,944	6,247,702	247,127	282,958	841,647
	\$	413,243	1,309,194	71,310	125,154	296,448
Panama.....	lb.	445,237	350,837	289,682	173,309	316,405
	\$	83,518	79,822	96,679	59,843	102,096
Cuba.....	lb.	1,602,632	1,406,606	3,121,445	2,348,575	2,875,070
	\$	297,495	357,204	964,198	814,423	1,006,199
Belgium.....	lb.	—	—	203,426	1,197,176	571,287
	\$	—	—	64,133	446,562	197,606
Denmark.....	lb.	10	—	—	1,206,852	149,658
	\$	2	—	—	415,318	43,798
France.....	lb.	—	4,136	1,847,880	639,407	18,862
	\$	—	1,018	494,307	306,152	6,173
Norway.....	lb.	59,765	45,821	15,195	3,291,655	535,645
	\$	10,883	9,513	4,131	1,241,567	201,005
Sweden.....	lb.	—	15,484	539	1,406,371	1,427,874
	\$	—	3,953	191	586,525	451,305
Mexico.....	lb.	168,389	802,876	858,444	918,521	1,181,528
	\$	31,349	217,070	293,712	344,351	401,126
Other countries.....	lb.	1,473,667	1,777,450	2,852,981	2,109,074	3,140,146
	\$	275,001	442,062	931,369	846,104	1,210,365
<b>Total.....</b>	<b>lb.</b>	<b>44,394,301</b>	<b>66,050,013</b>	<b>48,404,672</b>	<b>14,159,721</b>	<b>16,291,529</b>
	<b>\$</b>	<b>7,430,089</b>	<b>15,240,033</b>	<b>11,735,266</b>	<b>5,349,577</b>	<b>5,054,253</b>
Milk, condensed—						
Canada.....	lb.	652,895	1,318,033	11,340,919	4,578,983	2,243,827
	\$	48,406	128,942	1,567,823	661,453	375,158
Austria-Hungary.....	lb.	—	—	—	10,444,819	1,023,700 <sup>1</sup>
	\$	—	—	—	1,416,445	189,106 <sup>1</sup>
Germany.....	lb.	—	—	—	13,068,494	28,582,257
	\$	—	—	—	1,953,491	4,736,538
Gibraltar.....	lb.	1,351,216	929,583	9,552,897	39,467,731	2,113,256
	\$	120,976	112,895	1,144,234	5,130,223	324,708
Italy.....	lb.	490	390,788	26,557,402	10,475,590	4,130,643
	\$	44	39,647	4,038,680	1,526,549	503,350
Norway.....	lb.	—	108	530	8,625,216	1,126,561
	\$	—	12	66	1,068,596	126,375
Sweden.....	lb.	12,150	—	1,654	10,233,562	312,442
	\$	780	—	249	1,667,264	51,086
Switzerland.....	lb.	—	92,000	91,945	18,746,372	1,459,444
	\$	—	10,950	13,253	2,408,537	224,084
British India.....	lb.	1,441,681	7,049,194	34,371,600	10,130,675	12,491,128
	\$	101,746	587,150	4,808,363	1,212,213	1,749,532
Straits Settlements.....	lb.	492,493	5,425,284	5,863,190	6,444,295	8,723,883
	\$	46,628	631,972	947,741	908,881	1,325,129

<sup>1</sup>Austria only.

27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Milk, condensed—concluded					
Belgium..... lb.	4,538,792	25,153,971	45,504,596	61,596,636	17,943,347
\$	318,873	1,847,909	6,353,820	9,329,764	2,894,296
China..... lb.	3,079,288	4,495,800	2,369,049	5,555,679	4,481,405
\$	238,041	497,663	393,485	800,445	721,887
France..... lb.	4,353,071	30,263,356	40,942,488	114,818,165	58,833,303
\$	315,491	3,580,696	5,075,594	16,903,612	8,048,370
Netherlands..... lb.	2,374,184	12,850,724	—	11,821,267	5,623,693
\$	198,725	1,258,169	—	1,853,052	872,145
United Kingdom..... lb.	85,058,739	91,330,504	268,879,340	420,928,450	123,528,070
\$	6,526,087	8,096,387	33,338,459	59,849,249	20,414,760
Panama..... lb.	4,071,203	6,497,772	2,443,751	3,599,564	4,488,260
\$	342,482	698,625	328,054	511,248	663,866
Mexico..... lb.	1,499,279	4,526,742	4,142,818	2,946,455	7,982,170
\$	118,658	531,981	606,804	436,636	1,202,959
Cuba..... lb.	27,678,974	30,723,758	31,759,473	33,461,993	50,430,447
\$	2,426,046	3,164,657	4,893,689	4,899,391	8,146,333
Hong Kong..... lb.	2,608,797	5,801,270	4,937,745	2,269,288	3,304,846
\$	222,916	576,708	866,856	333,906	528,108
Japan..... lb.	4,749,560	4,221,372	3,735,838	4,123,127	5,048,340
\$	417,827	472,271	634,137	647,936	837,604
Philippine Islands..... lb.	2,587,328	7,729,034	8,039,055	14,085,937	12,463,085
\$	184,778	692,169	1,102,047	1,892,725	1,773,712
Poland and Danzig..... lb.	—	—	—	—	17,604,055
\$	—	—	—	—	2,863,203
Other countries..... lb.	13,027,480	20,341,938	50,605,464	45,443,116	37,139,815
\$	1,084,448	2,207,838	6,711,543	6,481,721	5,756,957
<b>Total..... lb.</b>	<b>159,577,620</b>	<b>259,141,231</b>	<b>551,139,754</b>	<b>852,865,414</b>	<b>411,077,982</b>
\$	<b>12,712,952</b>	<b>25,136,641</b>	<b>72,824,897</b>	<b>121,893,337</b>	<b>64,239,266</b>
Milk, all other, including cream, total..... \$	<b>524,426</b>	<b>253,629</b>	<b>528,607</b>	<b>1,729,884</b>	<b>1,381,380</b>
Oil cake and oil-cake meal, linseed and flax seed <sup>1</sup> —					
Canada..... lb.	1,325,840	6,384,269	29,597,736	4,897,344	3,372,125
\$	23,035	125,749	768,449	145,992	100,953
Norway..... lb.	1,402,658	8,834,584	30,797,280	—	—
\$	28,053	177,538	769,258	—	—
Germany..... lb.	—	—	—	—	16,762,236
\$	—	—	—	—	516,500
Sweden..... lb.	2,101,271	60,500	—	20,249,230	—
\$	40,287	1,018	—	559,192	—
Belgium..... lb.	—	—	—	80,622,811	25,904,744
\$	—	—	—	2,876,246	865,223
Denmark..... lb.	157,552,771	130,434,093	—	40,023,678	42,135,337
\$	2,915,634	2,352,952	—	1,589,583	1,626,455
France..... lb.	13,100	4,408,251	—	263,503	—
\$	273	93,420	—	5,951	—
Netherlands..... lb.	445,707,867	292,984,477	—	104,614,268	98,188,316
\$	3,334,952	5,596,874	—	3,832,858	3,266,190
United Kingdom..... lb.	25,532,292	86,400,787	15,422,381	84,678,808	42,425,875
\$	444,333	1,737,283	423,494	3,087,412	1,424,329
Other countries..... lb.	7,280,397	7,477,433	10,136,985	12,401,841	6,835,344
\$	148,562	167,676	288,070	405,997	243,050
<b>Total..... lb.</b>	<b>640,916,196</b>	<b>536,984,394</b>	<b>85,954,382</b>	<b>353,751,453</b>	<b>235,624,977</b>
\$	<b>11,935,129</b>	<b>10,252,510</b>	<b>2,249,271</b>	<b>12,503,231</b>	<b>8,042,700</b>
Seeds, grass—clover—					
United Kingdom..... lb.	1,984,648	2,168,921	3,324,639	3,564,730	1,741,250
\$	325,420	390,773	1,019,593	1,576,313	569,811
Denmark..... lb.	95,263	534,913	—	2,170,528	959,987
\$	16,017	101,855	—	696,693	447,127
Canada..... lb.	4,801,731	1,918,005	2,223,744	1,734,139	1,351,275
\$	916,162	361,772	696,605	791,018	649,563
Other countries..... lb.	234,578	1,265,054	437,093	474,352	933,183
\$	37,845	238,115	119,926	142,292	261,639
<b>Total..... lb.</b>	<b>7,116,220</b>	<b>5,886,893</b>	<b>5,985,526</b>	<b>7,943,749</b>	<b>4,985,695</b>
\$	<b>1,294,944</b>	<b>1,092,515</b>	<b>1,836,124</b>	<b>3,206,316</b>	<b>1,928,140</b>

<sup>1</sup>Oil cake and oil-cake meal only in 1918, 1919 and 1920.



**27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920.—con.**

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
<b>Seeds, grass—timothy—</b>					
Denmark..... lb.	1,097,165	493,405	348,900	2,019,380	458,012
\$	76,729	42,408	29,549	272,470	50,372
Norway..... lb.	38,650	—	394,760	1,379,265	220,211
\$	3,106	—	43,240	168,406	20,017
United Kingdom..... lb.	1,261,112	3,020,241	1,118,961	2,061,849	2,875,019
\$	87,981	194,895	119,732	253,751	344,075
Canada..... lb.	10,935,730	11,196,094	6,280,498	7,489,175	8,569,337
\$	847,692	666,328	638,271	892,071	1,092,524
Other countries..... lb.	277,600	430,173	421,265	396,689	1,399,555
\$	22,793	34,189	50,362	46,573	159,344
<b>Total..... lb.</b>	<b>13,610,257</b>	<b>15,139,913</b>	<b>8,564,384</b>	<b>13,346,358</b>	<b>13,522,134</b>
\$	<b>1,038,301</b>	<b>937,820</b>	<b>881,154</b>	<b>1,633,271</b>	<b>1,665,332</b>
<b>Other grass seeds—</b>					
United Kingdom..... lb.	853,681	1,159,988	890,771	1,856,228	1,178,246
\$	109,301	128,079	225,301	299,750	243,251
Canada..... lb.	1,919,804	2,282,433	1,488,335	1,567,318	1,322,426
\$	192,425	194,148	185,385	207,242	209,494
Other countries..... lb.	839,541	2,223,626	573,087	1,016,944	1,751,480
\$	100,199	378,874	132,018	210,110	360,056
<b>Total..... lb.</b>	<b>3,613,026</b>	<b>5,666,047</b>	<b>2,952,193</b>	<b>4,440,490</b>	<b>4,252,152</b>
\$	<b>401,925</b>	<b>701,101</b>	<b>542,704</b>	<b>717,102</b>	<b>812,801</b>
<b>Potatoes—</b>					
Canada..... bush.	230,115	574,190	781,574	610,622	856,430
\$	160,247	610,648	766,915	885,550	1,708,439
Panama..... bush.	280,725	154,268	76,287	60,647	77,247
\$	233,653	290,946	122,819	119,099	235,498
Mexico..... bush.	104,776	179,731	352,274	315,523	287,191
\$	102,788	335,423	453,441	470,143	551,436
Cuba..... bush.	2,324,882	1,278,148	2,396,550	2,325,097	2,679,684
\$	2,143,545	1,815,705	4,113,877	4,394,344	7,151,772
Argentina..... bush.	472,983	6,750	2,970	2,200	1,108
\$	339,391	13,475	5,740	5,000	2,365
Brazil..... bush.	182,277	69,789	10,994	238,723	7,071
\$	158,956	125,329	21,868	53,409	19,577
Other countries..... bush.	422,002	226,125	232,538	304,510	244,834
\$	347,160	322,853	349,689	547,658	530,841
<b>Total..... bush.</b>	<b>4,017,760</b>	<b>2,489,001</b>	<b>3,853,187</b>	<b>3,642,322</b>	<b>4,153,565</b>
\$	<b>3,485,740</b>	<b>3,514,379</b>	<b>5,834,349</b>	<b>6,475,203</b>	<b>10,199,928</b>
<b>Vegetables, canned—</b>					
France..... \$	35,031	51,523	6,324,482	838,600	15,579
United Kingdom..... \$	1,055,983	1,667,265	3,463,795	5,449,395	680,585
Canada..... \$	333,664	1,214,766	896,211	1,713,022	1,566,330
Panama..... \$	123,288	228,845	53,821	111,829	139,394
Cuba..... \$	211,960	424,483	217,511	1,024,804	1,385,549
Australia..... \$	120,542	106,353	254,693	107,736	247,494
Philippine Islands..... \$	115,409	100,984	174,418	217,624	320,063
Other countries..... \$	533,817	970,917	1,034,588	1,892,381	2,005,365
<b>Total..... \$</b>	<b>2,529,694</b>	<b>4,765,136</b>	<b>12,419,519</b>	<b>11,355,391</b>	<b>6,360,359</b>
<b>Vegetables—</b>					
Beans and dried peas—					
Belgium..... bush.	183,072	346,766	1,521,854	242,796	20,528
\$	563,027	1,418,374	9,013,291	1,309,778	83,672
France..... bush.	59,772	13,750	280,394	1,055,506	17,844
\$	172,277	71,161	1,636,781	5,973,316	86,092
Gibraltar..... bush.	1,329	—	40	199,801	—
\$	5,296	—	205	1,126,487	—
Italy..... bush.	2	—	82,676	166,393	1,714
\$	6	—	491,195	957,693	9,673
Norway..... bush.	80,082	66,787	5,369	86,086	17,263
\$	275,402	298,241	32,643	425,280	91,916
Netherlands..... bush.	782	246,920	—	8,008	57,116
\$	2,582	1,178,657	—	25,244	202,836





27.—Quantities and Values of Animal and Agricultural Products Exported from the United States to Principal Countries for the years ended June 30, 1916, 1917, and for the calendar years 1918, 1919 and 1920—concluded.

Exports by Countries.	June 30.		December 31.		
	1916.	1917.	1918.	1919.	1920.
Vegetables—concluded.					
Beans and dried peas—concluded.					
United Kingdom..... bush.	55,849	331,850	69,277	1,573,241	40,803
\$	185,270	1,509,394	422,317	8,454,529	319,733
Canada..... bush.	292,565	531,972	57,859	68,719	99,438
\$	914,679	2,926,035	349,910	336,762	409,785
Cuba..... bush.	625,628	450,603	534,521	541,758	915,949
\$	2,342,520	2,186,218	3,035,365	2,414,582	4,398,648
Germany..... bush.	-	-	-	23,305	298,010
\$	-	-	-	88,296	1,201,664
Poland and Danzig..... bush.	-	-	-	-	400,627
\$	-	-	-	-	1,378,476
Other countries..... bush.	461,302	176,295	169,316	305,913	191,122
\$	1,453,139	839,662	934,027	1,518,281	905,274
<b>Total..... bush.</b>	<b>1,760,383</b>	<b>2,164,943</b>	<b>2,721,306</b>	<b>4,271,526</b>	<b>2,060,414</b>
<b>\$</b>	<b>5,914,198</b>	<b>10,427,742</b>	<b>15,915,734</b>	<b>22,630,248</b>	<b>9,087,769</b>

### GRAIN STATISTICS.

Tables 28 to 32 give the principal statistics relating to the storage, inspection, grading and shipment of Canadian grain, the trade in which is regulated by the Dominion Government under The Canada Grain Act, 1912 (2 Geo. V, c. 27)<sup>1</sup>. Probably no country in the world possesses a system for the sale and shipment of its grain products so complete and elaborate as is that of Canada. In this system the grain elevator plays an important part. Few grain growers, especially the prairie provinces, have anything like adequate storage facilities, and the grain, as produced, is moved through a series of public elevators and warehouses, as well as over loading platforms, until finally placed in the holds of ocean-going vessels. For the calendar year ending December 1922, the total storage capacity of the 3,924 grain elevators and warehouses in Canada was 231,633,420 bushels, these figures being comparable with a total of 523 elevators and warehouses having a capacity of 18,329,352 bushels in 1901. For the purposes of grain shipment the country is divided into the eastern and western inspection divisions, the former including Quebec and the Maritime provinces and the portion of Ontario lying east of Port Arthur; the latter comprises the Northwest provinces and territories, British Columbia and that portion of Ontario lying west of and including the city of Port Arthur.

**Shipment of Canadian Grain.**—When grain was first shipped from western Canada it was hauled by the farmer, either loose or in sacks, to flat warehouses or simple wooden storehouses, built by grain dealers along the railway line. Elevators were introduced shortly after the year 1880. They were designed to take advantage of the flowing property of grain in bulk, and their equipment enabled the grain to be handled much more easily than was possible with the primitive warehouse. They have grown rapidly in number, whilst the old flat warehouse has practically disappeared. Dissatisfaction

<sup>1</sup> See Canada Year Book, 1912, p. 450.



with the elevators on the part of farmers resulted in the introduction of what are called "loading platforms." The loading platform is a wooden structure on a siding on to which a farmer can drive his team and from which he can shovel the grain into the car. There are now in existence some 1,921 loading platforms, distributed as follows: Manitoba, 579; Saskatchewan, 874; Alberta, 461; and British Columbia, 7. They have a loading capacity of 4,498 cars simultaneously, and during the last crop year some 22,765,201 bushels of grain were handled over these platforms.

**Grain Elevators.**—As a general rule the elevators are owned and operated by commercial companies or farmers' co-operative companies. When the farmer takes his grain to an elevator he can either sell the grain to the operator, in which case it is called "street grain," or he can hire a bin in the elevator to keep his grain distinct from all other grain, in which case it is called "special binned grain," or he can store it with other grain of the same grade. If he stores the grain either in a special or general bin, he arranges with the railway company for a car, and the elevator loads the grain into the car to his order. When the grain is loaded he can either sell it on the spot as track grain, or send it forward consigned on commission. The farmer hauls the grain unsacked, and bulk handling is universal. Under The Canada Grain Act the Dominion Government has power itself to erect and operate terminal grain elevators. One such elevator is in operation at Port Arthur, and 4 other government elevators are in operation at Moose-jaw Saskatoon, Calgary and Vancouver.

There are six different kinds of elevators defined in the Grain Act, viz., (1) "country elevators," situated at railway stations and receiving grain for storage before inspection; (2) "public elevators," which receive grain for storage from the western inspection division after inspection; (3) "eastern elevators," for the storage after inspection of eastern grown grain; (4) "terminal elevators," which receive or ship grain at points declared to be terminal; (5) "private terminal or hospital elevators," used for cleaning or other special treatment of rejected or damaged grain; under regulations governing sample markets all grain received into such elevators must be their own property, though the owner or owners of grain may contract for the handling or mixing of grain in such elevators; and (6) "manufacturing elevators," used or operated as part of any plant engaged in the manufacture of grain products in the western inspection division. Of these different kinds of elevators the most important, so far as the western grain trade is concerned, are the terminal elevators, which are situated at Fort William and Port Arthur, the twin cities at the head of lake Superior. They are called "terminal elevators," not because they are situated on lake Superior, or because they have been built at the lake terminal yards of the railway lines, but because the inspection of western grain ends at them. The grade given as it leaves the elevators at these points is the final grade, on which it is sold and delivered, both in Eastern Canada and in foreign markets. The grain stored in these elevators may be sold in Eastern Canada or

in the United States or in Europe, and may be shipped through either Canadian or United States channels. At the present time there are 11 of these terminal elevators (seven at Fort William and four at Port Arthur), and their total storage capacity is about 37,850,000 bushels, and 21 private terminal or hospital elevators with a capacity of 15,435,000 bushels (14 at Fort William and 7 at Port Arthur).

**Grain Inspection and Grading.**—All grain grown in Canada and shipped in car-load lots or cargoes from elevators is subject to government inspection and grading, and the grain is sold both at home and abroad on the inspection certificate entirely by grade and not by sample. As each car arrives at an inspection point it is sampled and graded by qualified samplers and inspectors appointed under the Act. When the grain arrives at the terminal elevators it is weighed, cleaned and binned according to grade under the direct supervision of the inspectors, and a warehouse receipt is issued by the elevator operator to the owner of the grain. When the grain is ordered out of the terminal elevator in car or cargo lots, it is again weighed and inspected, and it must be graded out as graded in; that is, if it was received into the terminal elevator as "No. 1," grain of equal quality must be shipped out. Thus the identity of grade of exported grain is carefully preserved through every stage of movement. The principal inspection point for western grain is at Winnipeg. The work is done by inspectors who are qualified by an examination held by the Board of Grain Examiners appointed by the Board of Grain Commissioners. Rules and regulations governing the duties of the above Inspectors are approved by the Grain Commissioners and the inspection is performed in offices rented by the Government in the Grain Exchange Buildings at Winnipeg and Fort William.

**Description of Grades.**—Under the Act, Canadian grain is divided into five general classes, viz., "No grade," "Condemned," "Rejected," "Commercial grade" and "Statutory grade." "No grade" means all good grain that has an excessive moisture, being tough, damp or wet, or otherwise unfit for warehousing. "Condemned grain" means all grain that is in a heating condition or is badly bin-burnt, whatever grade it might otherwise be. "Rejected grain" means all grain that is unsound, musty, dirty, smutty or sprouted, or that contains a large admixture of other kinds of grain, seeds or wild oats, or that from any other cause is unfit to be classed under any of the recognized grades. "Commercial grade" means grain which, because of climatic or other conditions, cannot be included in the grades provided for in the Act. More particularly it means that the grain of one year may vary from that of the preceding year, and that a proportion of it therefore cannot be dealt with under the grades laid down in the Act, and must be provided for by grades defined by the Standards Board, appointed under sections 48 to 51 of the Act. "Statutory grades" means grain of the highest grades which are defined by Parliament, embodied in the Grain Act. There are four of these grades for Manitoba spring wheat, three each for Alberta Red and White winter wheat and two for Alberta Mixed winter

wheat. In the same way there are statutory definitions of the highest grades of oats, barley, rye and flaxseed. Thus the statutory definitions can only be changed by Parliament; they do not vary with the crop, but are constant. The commercial grades, on the other hand, are fixed by the Standards Board, and may vary from year to year. The Act defines four grades of western spring wheat, viz., No. 1 Hard, No. 1 Northern, No. 2 Northern and No. 3 Northern, whilst the Standards Board has defined three additional grades, viz., No. 4 Northern, No. 5 Northern and No. 6 Northern. But wheat of any of the six grades of Northern may fall under the general categories of "no grade," "condemned," or rejected." Grain, as inspected and graded at Winnipeg, is received into the terminal elevators, but is again finally inspected and graded in bulk as it is loaded into the lake steamers. For this final grading the grain is sampled at three places, viz., in the tunnels as the grain flows from the storage bins to the working house, on the floor of the working house and on the steamer as it pours from the shipping bin to the hold.

**Recent Developments.**—The construction of the Panama Canal has necessitated the provision of elevator and inspection facilities for grain to be shipped by this route. To meet the new requirements it has been decided to erect at the Hudson bay and Pacific coasts transfer elevators similar to those at Montreal, Halifax and St. John, and at strategic points in the interior, terminal elevators similar to the elevators at Fort William and Port Arthur. Elevators have been erected at Moosejaw, Saskatoon, Calgary and Vancouver. The first two have been in operation since October 1914; while the Calgary elevator commenced operations in September 1915 and the Vancouver elevator in November 1916. These have a total storage capacity of 10,750,000 bushels. These elevators bring the work of inspection somewhat nearer to the grain-growing area. In addition, they provide, for the first time in Western Canada, hospital apparatus upon the grain field to treat damaged grain. The elevators also give a certain amount of additional storage capacity, which is useful in periods of congestion. Besides, they place in the hands of the producer a commercial document in the shape of a warehouse receipt to enable him to realize money on his product at the current rate of interest and dispose of it as he sees fit. It was not intended that these elevators should take the place of the Lake terminal elevators for grain shipped east, or that they should be very much utilized for east-going grain during the period of navigation on the Great Lakes. They were built partly because of the need of hospital apparatus on the grain-growing area, partly because of the advisability of having some reserve storage for time of emergency, and partly because of the necessity of providing for the Panama Canal route in a way that would give the route a fair trial. During the past year this route has become a large factor in carrying grain to Europe. The enormous quantity of grain grown in Western Canada and the difficulty of shipping it all by the eastern route—a difficulty enhanced by the shortness of the period of



navigation and the long rail haul from the grain fields to the Atlantic—constitute conditions which have led to the hope that the Panama Canal will be an immense gain to the grain growers of Alberta.

Table 28 shows for the license years 1901 to 1922 the number of railway stations at which elevators are placed, the number of elevators and warehouses and their total storage capacity, the figures being given by provinces for the country elevators of the west, and by description of elevators for the rest of the country. Tables 29 and 30 give statistics of the inspection of grain for the fiscal years 1920, 1921, 1922, and 1914-22 and Tables 31 and 32 of the shipment of grain by vessel and rail for 1920 and 1921.

**28.—Number and Storage Capacity of Canadian Grain Elevators in the license years 1901-1922.**

**COUNTRY ELEVATORS IN MANITOBA.**

Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.	Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1901....	167	333	76	10,323,272	1912....	336	705	10	22,410,500
1902....	180	427	69	12,255,000	1913....	338	698	10	22,253,150
1903....	216	558	59	16,121,400	1914....	346	689	6	21,690,000
1904....	234	651	46	19,297,000	1915....	348	678	8	22,045,500
1905....	247	669	33	19,557,630	1916....	348	682	6	22,113,000
1906....	271	699	33	20,656,100	1917....	352	672	—	21,250,000
1907....	275	685	32	20,502,200	1918....	366	690	—	21,825,000
1908....	282	685	20	21,015,600	1919....	371	702	—	22,926,300
1909....	300	678	13	20,558,500	1920....	379	695	—	23,024,500
1910....	312	696	11	21,624,500	1921....	380	692	—	22,073,600
1911....	329	707	12	21,813,800	1922....	386	701	—	22,159,100

**COUNTRY ELEVATORS IN NORTHWEST TERRITORIES.**

Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.	Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1901....	50	88	21	2,436,080	1904....	86	261	18	7,917,000
1902....	60	111	18	3,194,000	1905....	109	298	13	8,934,000
1903....	66	176	23	5,105,000					

**COUNTRY ELEVATORS IN SASKATCHEWAN.**

Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.	Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1906....	113	307	15	8,951,060	1915....	653	1,619	5	48,074,500
1907....	161	452	10	12,989,500	1916....	710	1,782	1	52,943,000
1908....	176	508	8	14,666,500	1917....	732	1,945	—	58,625,000
1909....	254	615	14	17,924,500	1918....	752	2,117	—	64,384,200
1910....	330	835	9	24,314,500	1919....	753	2,160	—	67,331,664
1911....	374	904	5	26,465,000	1920....	753	2,165	—	68,058,470
1912....	430	1,007	5	29,314,000	1921....	767	2,134	—	68,867,020
1913....	513	1,246	6	36,503,000	1922....	782	2,224	—	70,181,320
1914....	647	1,465	5	42,995,000					

**COUNTRY ELEVATORS IN ALBERTA.**

Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.	Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1906....	27	43	2	1,715,500	1915....	219	449	14	16,089,000
1907....	49	71	10	2,735,500	1916....	249	525	11	13,807,000
1908....	59	109	6	3,818,900	1917....	285	670	—	23,106,000
1909....	72	120	14	4,386,400	1918....	304	808	—	28,833,000
1910....	121	229	17	8,080,400	1919....	314	830	—	32,148,000
1911....	130	249	13	8,764,500	1920....	334	853	—	33,462,000
1912....	142	279	14	9,863,000	1921....	350	897	—	35,716,000
1913....	168	321	19	11,565,500	1922....	357	915	—	36,092,000
1914....	195	397	11	14,793,000					



# 28.—Number and Storage Capacity of Canadian Grain Elevators in the license years 1901-1922—con.

## COUNTRY ELEVATORS IN BRITISH COLUMBIA.

Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.	Year.	Sta- tions.	Ele- vators.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1907....	2	3	—	320,000	1915....	5	7	1	440,000
1908....	4	3	2	276,000	1916....	5	6	1	459,000
1909....	3	3	—	168,000	1917....	6	9	—	527,000
1910....	6	6	1	441,000	1918....	6	10	—	548,000
1911....	7	6	2	444,000	1919....	8	13	—	613,000
1912....	7	6	2	457,000	1920....	7	13	—	561,000
1913....	6	7	2	562,000	1921....	7	12	—	517,000
1914....	6	7	2	562,000	1922....	7	12	—	531,000

## TOTALS OF COUNTRY ELEVATORS.

1901....	217	421	97	12,759,352	1912....	915	1,997	31	62,074,500
1902....	240	538	87	15,449,000	1913....	1,025	2,272	37	70,883,650
1903....	282	734	82	21,226,400	1914....	1,194	2,558	24	80,040,000
1904....	320	912	64	27,214,000	1915....	1,225	2,753	28	86,649,000
1905....	356	967	46	28,491,630	1916....	1,312	2,995	19	94,322,000
1906....	411	1,049	50	31,323,200	1917....	1,375	3,296	—	103,508,000
1907....	487	1,212	52	36,597,200	1918....	1,428	3,625	—	115,600,200
1908....	521	1,305	36	39,777,000	1919....	1,446	3,705	—	123,018,964
1909....	629	1,416	41	43,037,400	1920....	1,473	3,726	—	125,105,970
1910....	769	1,766	38	54,460,400	1921....	1,504	3,785	—	127,173,620
1911....	840	1,866	32	57,487,300	1922....	1,532	3,852	—	128,963,420

## INTERIOR TERMINAL ELEVATORS.

1913-14..	1	1	—	1,000,000	1918-19..	5	5	—	11,500,000
1914-15..	3	3	—	8,000,000	1919-20..	5	5	—	11,500,000
1915-16..	(1)	4	—	10,500,000	1920-21..	5	5	—	11,500,000
1916-17..	(1)	4	—	10,500,000	1921-22..	5	5	—	11,500,000
1917-18..	(5)	5	—	11,500,000					

## INTERIOR HOSPITAL ELEVATORS.

1913-14..	(3)	5	—	680,000	1918-19..	5	5	—	460,000
1914-15..	(3)	6	—	805,000	1919-20..	5	5	—	485,000
1915-16..	(3)	7	—	825,000	1920-21..	5	6	—	585,000
1916-17..	(3)	6	—	805,000	1921-22..	4	6	—	605,000
1917-18..	(4)	5	—	505,000					

## BRITISH COLUMBIA TERMINAL AND PUBLIC ELEVATORS.

1915-16..	(1)	2	—	1,266,000	1919-20..	1	2	—	1,266,000
1916-17..	(1)	2	—	1,266,000	1920-21..	1	1	—	1,250,000
1917-18..	(1)	2	—	1,266,000	1921-22..	(1)	1	—	1,250,000
1918-19..	(1)	2	—	1,266,000					

NOTE.—Figures in parentheses are excluded from the grand total.

# 28.—Number and Storage Capacity of Canadian Grain Elevators in the license years 1991-1922—concluded.

## ONTARIO TERMINAL ELEVATORS.

Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.	Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1901....	2	5	—	5,570,000	1912....	4	15	—	25,700,400
1902....	3	6	—	7,100,000	1913 <sup>1</sup> ...	4	20	—	28,380,000
1903....	3	6	—	8,580,000	1914 <sup>1</sup> ...	4	23	—	41,455,000
1904....	3	7	—	13,422,000	1915 <sup>1</sup> ...	4	25	—	42,180,000
1905....	3	10	—	17,912,000	1916 <sup>1</sup> ...	4	25	—	43,085,000
1906....	3	9	—	18,580,000	1917 <sup>1</sup> ...	4	26	—	45,325,000
1907....	3	8	—	18,075,000	1918 <sup>1</sup> ...	4	29	—	49,370,000
1908....	3	10	—	17,058,700	1919 <sup>1</sup> ...	4	31	—	51,405,000
1909....	3	10	—	18,852,700	1920 <sup>1</sup> ...	4	30	—	52,255,000
1910....	3	13	—	21,740,700	1921 <sup>1</sup> ...	4	30	—	54,685,000
1911....	4	15	—	25,700,400	1922 <sup>1</sup> ...	2	32	—	53,285,000

## ONTARIO MILLING ELEVATORS.

Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.	Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1906....	1	1	—	550,000	1915....	2	3	—	1,700,000
1907....	1	1	—	550,000	1916....	2	3	—	1,700,000
1908....	2	2	—	1,700,000	1917....	2	3	—	1,700,000
1909....	1	2	—	1,300,000	1918....	2	3	—	1,700,000
1910....	2	3	—	1,700,000	1919....	2	3	—	1,800,000
1911....	2	3	—	1,700,000	1920....	2	4	—	1,840,000
1912....	2	3	—	1,700,000	1921....	2	4	—	1,840,000
1913....	3	3	—	1,700,000	1922....	2	4	—	1,840,000
1914....	2	3	—	1,700,000					

## ONTARIO COUNTRY ELEVATORS.

Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.	Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1911....	—	1	—	40,000	1917....	—	1	—	40,000
1912....	—	1	—	40,000	1918....	—	1	—	40,000
1913....	—	1	—	40,000	1919....	—	1	—	40,000
1914....	—	1	—	40,000	1920....	—	—	—	—
1915....	—	1	—	40,000	1921....	—	—	—	—
1916....	—	1	—	40,000	1922....	—	—	—	—

## PUBLIC ELEVATORS.

Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.	Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1909....	14	18	—	14,826,000	1916....	15	22	—	29,250,000
1910....	14	20	—	16,365,000	1917....	16	22	—	30,700,000
1911....	17	24	—	20,535,000	1918....	17	24	—	31,610,000
1912....	16	21	—	19,135,000	1919....	17	25	—	31,790,000
1913....	17	23	—	25,220,000	1920....	17	25	—	33,805,000
1914....	16	22	—	29,850,000	1921....	17	24	—	34,180,000
1915....	15	22	—	29,250,000	1922....	14	24	—	34,180,000

## GRAND TOTAL OF CANADIAN ELEVATORS.

Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.	Year.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1901....	219	426	97	18,329,352	1912 <sup>2</sup> ...	937	2,037	31	108,649,900
1902....	243	544	87	22,549,000	1913 <sup>2</sup> ...	1,049	2,319	37	127,224,550
1903....	285	740	82	29,806,400	1914 <sup>2</sup> ...	1,220	2,613	24	154,765,000
1904....	323	919	64	40,636,000	1915 <sup>2</sup> ...	1,252	2,813	28	168,624,000
1905....	359	977	46	46,403,630	1916....	1,338	3,059	19	180,988,000
1906....	415	1,059	50	50,453,200	1917....	1,402	3,360	—	193,844,000
1907....	491	1,221	52	55,222,200	1918....	1,461	3,694	—	211,591,200
1908....	526	1,318	36	58,535,700	1919....	1,480	3,777	—	221,279,964
1909 <sup>2</sup> ...	647	1,446	41	78,016,100	1920....	1,507	3,797	—	226,256,970
1910 <sup>2</sup> ...	788	1,802	38	94,266,100	1921....	1,538	3,855	—	231,213,620
1911 <sup>2</sup> ...	863	1,909	32	105,462,700	1922....	1,559	3,924	—	231,633,420

<sup>1</sup>Including Hospital Elevators. <sup>2</sup>Including Public Elevators in the Eastern Inspection Division.

NOTE.—The present average capacity of railway cars for the carriage of grain is for Wheat 1,275, Oats 2,000, Barley 1,400, Flax 1,100, and Rye 1,275 bushels for the crop of 1921.

## 29.—Quantities of Grain Inspected during the fiscal years 1920-1922.

Grades of Grain.	1920.		1921.		1922	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
Wheat, Spring—	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Man. No. 1 Hard...	-	178,850	-	160,000	-	2,757,825
Northern No. 1.....	-	41,717,375	-	71,487,500	-	66,725,850
"    No. 2.....	-	26,452,650	-	42,891,250	-	46,909,800
"    No. 3.....	-	19,226,375	-	42,192,500	-	53,806,275
"    No. 4.....	-	3,591,700	-	8,907,500	-	18,465,825
"    No. 5.....	-	1,470,000	-	1,927,500	-	4,944,450
"    No. 6.....	-	923,650	-	535,000	-	1,204,475
Feed.....	-	401,800	-	147,500	-	295,800
Rejected Smutty—						
No. 1.....	-	467,950	-	538,750	-	716,550
No. 2.....	-	-	-	-	-	-
No grade.....	-	16,509,325	-	11,401,250	-	11,965,875
Condemned.....	-	94,325	-	53,750	-	24,225
No established grade.....	-	4,900	-	10,000	-	16,575
Commercial grades—						
No. 1.....	2,000	-	446,306	33,750	209,588	-
No. 2.....	1,200	-	75,756	-	45,816	-
No. 4.....	-	51,450	-	-	-	-
No. 5.....	-	17,150	-	-	-	-
No. 6.....	-	7,350	-	-	-	-
No. 1 Spring.....	70,152	-	14,121	-	1,100	-
No. 2 ".....	107,996	-	136,221	-	31,480	-
No. 3 ".....	11,421	-	37,214	-	6,950	-
Rejected.....	6,460	-	6,302	-	3,000	-
No grade.....	8,500	-	3,000	-	1,000	-
Goose No. 1.....	-	9,800	-	-	-	-
"    No. 2.....	135,455	1,225	3,000	-	1,000	-
"    No. 3.....	17,913	-	4,200	-	2,000	-
Rejected.....	7,000	-	1,000	-	3,000	-
Rejected.....	-	4,485,950	-	3,830,000	-	2,768,025
No. 1 Durum.....	-	15,925	-	52,500	-	67,575
No. 2 ".....	-	37,975	-	90,000	-	276,675
No. 3 ".....	-	18,375	-	118,750	-	322,575
No. 4 ".....	-	-	-	3,750	-	24,225
Rejected.....	-	-	-	-	-	6,375
Durum Spring.....	-	-	-	-	-	53,550
Red Durum.....	-	-	-	-	-	28,050
U. S. Durum—						
Amber No. 2.....	-	-	2,798,553	-	1,891,248	-
Amber No. 3.....	-	-	3,963,062	-	581,484	-
Mixed No. 2.....	-	-	160,647	-	2,715,349	-
"    No. 3.....	-	-	-	-	-	-
No. 2 Mixed D... Wheat.....	-	-	-	-	1,024,191	-
Dark No. 2 Nor.....	-	-	-	-	70,718	-
No. 4 Special.....	-	3,894,475	-	686,250	-	-
No. 5 ".....	-	937,125	-	127,500	-	-
No. 6 ".....	-	215,600	-	30,000	-	-
No grade.....	-	-	-	-	-	-
Smutty—Wheat and Rag weed.....	-	-	-	-	-	12,750
Spring and Durum.....	-	-	-	-	-	105,825
Wheat and Rye.....	-	-	-	-	-	30,600
Rejected and Sprouted.....	-	-	-	-	-	9,544,650
Durum and Barley.....	-	-	-	-	-	1,275
<b>Total Spring Wheat.....</b>	<b>368,127</b>	<b>120,721,300</b>	<b>7,650,342</b>	<b>185,225,000</b>	<b>6,587,924</b>	<b>221,065,875</b>

## 29.—Quantities of Grain Inspected during the fiscal years 1920-1922—con.

Grades of Grain.	1920.		1921.		1922.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat, Winter—						
U.S. Hard Winter—						
No. 1.....	—	—	794,614	—	4,061,611	—
No. 2.....	31,536	—	749,760	—	8,828,266	—
No. 3.....	—	—	79,306	—	159,424	—
No. 2 Red Hard Winter.....	—	—	—	—	530,067	—
White Winter—						
No. 1.....	6,397	—	34,501	—	3,455	—
No. 2.....	33,100	—	452,636	—	18,236	—
No. 3.....	18,100	—	38,975	—	4,000	—
No. 1 Winter.....	—	—	—	—	—	15,300
No. 2 ".....	—	—	—	—	—	3,825
White Winter—con.						
Rejected.....	3,000	—	14,258	—	12,500	—
No grade.....	—	—	9,461	—	—	—
Mixed Winter—						
No. 1.....	1,100	—	7,497	—	—	—
No. 2.....	43,000	—	439,624	—	103,330	—
No. 3.....	28,416	—	135,006	—	56,303	—
No. 4.....	—	—	4,635	—	—	—
No grade.....	2,500	—	48,641	—	6,245	—
Rejected.....	19,800	—	45,142	—	120,883	—
U.S. No. 1.....	—	—	8,115	—	—	—
Alberta Red Winter—						
No. 1.....	—	18,375	4,560	83,750	—	22,950
No. 2.....	13,828	14,700	184,098	23,750	16,918	10,200
No. 3.....	28,644	3,675	77,186	2,500	27,600	2,550
No. 4.....	—	—	2,200	—	—	1,275
U.S. No. 1 Red Winter.....	—	—	249,804	—	—	—
U.S. No. 2 Red Winter.....	—	—	1,104,864	—	5,012,449	—
Rejected.....	11,000	—	38,794	—	36,040	—
Smutty.....	—	—	—	1,250	—	—
No grade.....	2,000	—	4,138	2,500	—	—
Alberta White Winter—						
No. 2.....	—	26,950	—	—	—	—
No. 3.....	—	4,900	—	—	—	—
No. 4.....	—	—	—	—	—	—
Rejected.....	—	—	—	—	—	—
No grade.....	—	1,225	—	—	—	—
Commercial grades—						
No. 1 W.W.....	5,100	—	14,061	—	56,862	—
No. 2 W.W.....	11,865	—	—	—	1,780	—
No. 1 M.W.....	11,865	—	2,200	—	47,340	—
No. 2 M.W.....	3,200	—	—	—	—	—
No. 1 R.W.....	5,000	—	—	—	—	—
No. 2 R.W.....	1,200	—	14,554	—	1,200	—
No grade, tough.....	—	—	—	—	90	—
<b>Total Winter Wheat.</b>	<b>268,786</b>	<b>69,825</b>	<b>4,558,630</b>	<b>113,750</b>	<b>19,104,599</b>	<b>56,100</b>
<b>Total Spring and Winter Wheat.....</b>	<b>636,913</b>	<b>120,791,125</b>	<b>12,208,972</b>	<b>185,338,750</b>	<b>25,692,523</b>	<b>221,065,875</b>
Indian Corn—						
No. 1 American.....	—	—	1,500	—	1,246,709	—
No. 2 American.....	290,872	—	16,222	—	56,437,158	—
No. 3 American.....	171,762	—	184,445	—	137,773	—
No. 4 American.....	—	—	—	—	49,190	—
Rejected.....	1,100	—	14,410	—	5,200	—
American, other.....	8,674	—	56,188	—	11,152	—
Argentine corn.....	—	—	42,055	—	4,284	—
<b>Total Corn.....</b>	<b>472,408</b>	<b>7,000</b>	<b>314,820</b>	<b>2,000</b>	<b>51,891,471</b>	<b>5,000</b>



## 29.—Quantities of Grain inspected during the fiscal years, 1920-1922—concluded.

Grades of Grain.	1920.		1921.		1922.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
<b>Oats—</b>						
Extra No. 1.....	-	-	-	-	-	-
No. 1.....	-	25,350	-	2,000	-	90,000
No. 2.....	94,343	8,796,450	375,315	92,000	6,980	15,334,000
No. 3.....	285,512	10,315,500	1,411,206	13,170,000	52,193	14,934,000
No. 4.....	41,250	-	294,069	13,818,000	30,350	-
U.S. Rejected.....	-	-	-	-	-	-
Feed extra No. 1.....	-	5,682,030	-	4,558,000	-	5,508,000
Feed No. 1.....	-	7,174,050	-	6,340,000	-	6,290,000
Feed No. 2.....	-	7,092,150	-	6,266,000	-	4,268,000
Rejected.....	137,618	1,604,850	215,071	1,304,000	182,850	592,000
No grade.....	6,750	17,364,750	130,792	18,912,000	-	22,582,000
Condemned.....	-	25,350	-	22,000	-	44,000
Mixed.....	-	1,296,750	-	1,176,000	-	886,000
Speltz.....	-	1,950	-	2,000	-	-
U.S. No. 2.....	65,755	-	-	-	-	-
U.S. No. 3.....	32,416	-	-	-	-	-
U.S. No. 3 clipped.....	13,632	-	-	-	-	-
<b>Total Oats.....</b>	<b>677,276</b>	<b>59,379,450</b>	<b>2,426,453</b>	<b>65,662,000</b>	<b>272,373</b>	<b>70,528,000</b>
<b>Buckwheat—</b>						
No. 2.....	40,770	-	141,014	-	289,878	-
No. 3.....	2,511	-	7,450	-	17,727	-
No grade.....	35,263	-	19,173	-	9,170	-
Rejected.....	42,851	-	5,631	-	15,750	-
<b>Total Buckwheat.....</b>	<b>121,395</b>	<b>2,000<sup>1</sup></b>	<b>173,268</b>	<b>-</b>	<b>332,525</b>	<b>-</b>
<b>Barley—</b>						
No. 1.....	1,250	-	-	-	-	-
No. 2.....	214,193	-	1,250	-	-	-
No. 3, extra.....	688,875	25,650	145,531	99,400	4,370	58,800
No. 4.....	414,802	5,451,300	358,309	5,026,000	151,509	7,051,800
No. 3.....	55,399	3,809,700	110,380	3,094,000	96,365	3,101,000
Feed.....	-	1,672,650	-	1,313,200	-	624,400
Rejected.....	31,466	1,166,400	86,557	1,029,000	255,527	786,800
No grade.....	3,800	3,518,100	-	3,085,600	-	3,252,200
Condemned.....	-	-	-	9,800	-	2,800
Smutty.....	-	-	-	8,400	-	1,400
Barley and Rye.....	-	-	-	-	-	1,400
U.S. No. 1.....	-	-	91,430	-	-	-
U.S. No. 3.....	-	-	49,999	-	51,701	-
<b>Total Barley.....</b>	<b>1,409,785</b>	<b>15,643,300</b>	<b>843,456</b>	<b>13,665,400</b>	<b>559,472</b>	<b>14,880,600</b>
Rye, all grades.....	414,510	2,172,350	1,387,493	2,967,500	221,401	3,966,525
U.S. Rye.....	677,892	-	4,572,841	-	6,845,117	-
<b>Flaxseed—</b>						
No. 1 N.W.C.....	-	1,801,000	-	3,146,525	-	2,993,100
No. 1 M.....	-	-	-	-	-	-
No. 2 C.W.....	-	295,000	-	712,725	-	566,500
No. 3 C.W.....	-	83,000	-	522,450	-	78,100
No grade.....	-	124,000	-	232,200	-	162,600
Rejected.....	-	32,000	-	422,475	-	28,600
Condemned.....	-	-	-	-	-	1,100
Fake Flax.....	-	-	-	-	-	2,200
<b>Total Flaxseed.....</b>	<b>-</b>	<b>2,335,000</b>	<b>-</b>	<b>5,036,375</b>	<b>-</b>	<b>3,832,400</b>
Peas, all grades.....	29,888	-	3,000	-	10,781	-
Screenings.....	-	669,000	-	455,000	-	484,000

<sup>1</sup>No grade given.

30.—Quantities of Grain inspected during the fiscal years ended March 31, 1914-1922.

Grain.	Eastern Division.					Western Division.	Grand Total.
	Kingston.	Peterboro.	Toronto.	Montreal.	Total.		
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat...1914	1,000	40,968	104,590	128,000	274,558	154,995,750	155,270,308
1915	-	38,402	139,702	2,628,670	2,806,774	107,916,750	110,723,524
1916	-	-	376,777	1,412,246	1,789,023	251,277,000	253,066,023
1917	-	-	423,871	209,168	632,039	192,070,700	192,702,739
1918	-	-	281,704	448,144	730,118	193,538,100	194,268,218
1919	-	-	386,814	371,389	758,203	124,849,525	125,607,728
1920	-	-	403,135	233,778	636,913	120,791,125	121,428,038
1921	-	-	2,087,539	10,121,433	12,208,972	185,338,750	197,547,722
1922	-	-	602,774	25,089,749	25,692,523	221,065,875	246,758,398
Corn....1914	-	-	21,130	72,990	94,120	-	94,120
1915	-	-	16,405	111,501	127,906	-	127,906
1916	-	-	18,252	112,321	130,573	-	130,573
1917	-	-	-	1,286,779	1,286,779	-	1,286,779
1918	-	-	1,676	743,349	745,025	-	745,025
1919	-	-	-	592,340	592,340	-	592,340
1920	-	-	-	472,408	472,408	7,000	479,408
1921	-	-	-	314,820	314,820	2,000	316,820
1922	-	-	5,355	51,886,116	51,891,471	5,000	51,896,471
Oats....1914	-	62,200	543,657	73,582	679,439	73,035,300	73,714,739
1915	-	109,388	933,680	1,706,349	2,749,417	35,837,800	38,587,217
1916	-	-	1,376,546	1,723,966	3,100,512	68,649,000	71,749,512
1917	-	-	445,031	449,268	894,299	95,159,750	96,054,049
1918	-	-	459,802	427,900	887,702	79,409,850	80,297,552
1919	-	-	1,537,863	1,900,309	3,438,172	36,154,000	39,592,172
1920	-	-	344,239	332,987	677,276	59,379,450	60,056,726
1921	-	-	643,412	1,783,041	2,426,453	65,662,000	68,088,453
1922	-	-	241,140	31,233	272,373	70,528,000	70,800,373
Buck-wheat..1914	-	62,771	72,730	4,108	139,609	-	139,609
1915	-	23,760	284,324	28,008	336,092	-	336,092
1916	-	-	339,747	127,508	467,255	-	467,255
1917	-	-	77,802	37,737	115,539	-	115,539
1918	-	-	71,652	54,386	126,038	-	126,038
1919	-	-	293,914	62,050	355,964	-	355,964
1920	-	-	82,863	38,532	121,395	2,000	123,395
1921	-	-	145,606	27,762	173,268	-	173,268
1922	-	-	262,262	70,263	332,525	-	332,525
Barley...1914	-	-	125,812	9,297	135,109	15,944,500	16,079,609
1915	-	1,100	230,122	24,146	255,368	4,953,000	5,208,368
1916	-	-	322,367	30,220	352,587	9,574,100	9,926,687
1917	-	-	134,691	10,927	145,618	10,627,500	10,773,118
1918	-	-	319,592	165,927	485,519	10,743,200	11,228,719
1919	-	-	727,047	773,420	1,500,467	9,596,600	11,097,067
1920	-	-	557,842	851,943	1,409,785	15,643,800	17,053,585
1921	-	-	237,868	805,588	843,456	13,655,400	14,508,856
1922	-	-	189,040	370,432	559,472	14,880,600	15,440,072
Rye.....1914	-	11,857	4,980	162,900	179,737	72,000	251,737
1915	-	4,854	144,765	97,178	246,797	123,000	369,797
1916	-	-	374,782	179,157	553,939	116,000	669,939
1917	-	-	251,592	691,448	943,040	190,000	1,133,040
1918	-	-	218,994	389,133	608,127	478,000	1,086,127
1919	-	-	162,461	33,289	195,750	1,020,000	1,215,750
1920	-	-	163,395	929,007	1,092,402	2,172,350	3,264,752
1921	-	-	333,318	5,627,016	5,960,334	2,967,500	8,927,834
1922	-	-	97,431	6,969,087	7,066,518	3,966,525	11,033,043
Flaxseed.1914	-	-	-	-	-	18,432,750	18,432,750
1915	-	-	-	-	-	4,001,600	4,001,600
1916	-	-	-	-	-	3,303,600	3,303,600
1917	-	-	-	-	-	7,086,200	7,086,200
1918	-	-	-	-	-	6,862,900	6,862,900
1919	-	-	-	14,351	14,351	3,075,900	3,090,251
1920	-	-	-	-	-	2,335,000	2,335,000
1921	-	-	-	-	-	5,036,375	5,036,375
1922	-	-	-	-	-	3,832,400	3,832,400

**30.—Quantities of Grain inspected during the fiscal years ended March 31,  
1914-1922—concluded.**

Grain.	Eastern Division.					Western Division.	Grand Total.
	Kingston.	Peterboro.	Toronto.	Montreal.	Total.		
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Peas.....1914	-	-	1,667	2,900	4,567	-	4,567
1915	-	-	12,300	-	12,300	-	12,300
1916	-	-	14,944	400	15,344	-	15,344
1917	-	-	10,619	3,025	13,644	-	13,644
1918	-	-	1,000	3,100	4,100	-	4,100
1919	-	-	8,871	2,858	11,729	-	11,729
1920	-	-	19,072	10,816	29,888	-	29,888
1921	-	-	2,000	1,000	3,000	-	3,000
1922	-	-	10,781	-	10,781	-	10,781
Screenings....1916	-	-	-	-	-	281,000	281,000
1917	-	-	-	-	-	452,000	452,000
1918	-	-	-	-	-	-	-
1919	-	-	-	-	-	669,000	669,000
1920	-	-	-	-	-	455,000	455,000
1921	-	-	-	-	-	484,000	484,000
1922	-	-	-	-	-	-	-
<b>Total....1914</b>	<b>1,000</b>	<b>177,796</b>	<b>874,566</b>	<b>453,777</b>	<b>1,507,139</b>	<b>262,667,300<sup>1</sup></b>	<b>264,174,439<sup>1</sup></b>
" 1915	-	177,504	1,761,298	4,674,160 <sup>2</sup>	6,612,962 <sup>2</sup>	153,038,150 <sup>3</sup>	159,651,112
" 1916	-	-	2,823,415	3,585,818	6,409,233	333,200,700	339,609,933
" 1917	-	-	1,343,606	2,688,352	4,030,958	305,586,150	309,617,108
" 1918	-	-	1,354,420	2,232,209	3,586,629	291,032,050	294,618,679
" 1919	-	-	3,116,970	3,750,006	6,866,976	174,696,025	181,563,001
" 1920	-	-	1,570,596	2,869,741	4,440,067	200,999,725	205,439,792
" 1921	-	-	3,449,643	18,480,660	21,930,303	273,127,025	295,057,328
" 1922	-	-	1,408,783	84,416,880	85,825,663	314,762,400	400,588,063

<sup>1</sup>Includes 186,000 bushels of screenings and 1,000 bushels of speltz.

<sup>2</sup>Includes 78,308 bushels of Argentine corn.

<sup>3</sup>Includes 206,000 bushels of screenings.

**31.—Shipments of Grain by Vessels from Fort William and Port Arthur for the navigation seasons 1920 and 1921.**

Vessels.	1920.			1921.		
	To Canadian ports.	To American ports.	Total shipments.	To Canadian ports.	To American ports.	Total shipments.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Canadian Vessels—						
Wheat.....	55,683,016	57,746,415	113,429,461	60,454,217	84,474,599	153,928,816
Oats.....	10,388,752	3,980,269	14,369,021	39,335,427	5,835,494	45,170,921
Barley.....	5,761,120	830,808	6,591,928	9,398,118	2,503,745	11,901,863
Flaxseed.....	587,144	1,189,528	1,767,672	952,110	3,476,189	4,428,299
Rye.....	1,050,851	1,144,058	2,194,909	839,197	1,611,089	2,450,286
<b>Total.....</b>	<b>73,470,913</b>	<b>64,882,078</b>	<b>138,352,991</b>	<b>119,979,069</b>	<b>97,901,116</b>	<b>217,880,185</b>
Mixed grains.. lb.	3,252,397	5,884,353	9,136,750	59,192,484	21,881,466	81,073,950
Screenings.. tons.	-	46,334	46,334	9,379	20,501	29,880

**32.—Shipments of Grain by vessels and all rail route from Fort William and Port Arthur for the crop years ended August 31, 1920 and 1921.**

Grain.	1919-20.			1920-21.		
	Vessels.	Rail.	Total.	Vessels.	Rail.	Total.
Wheat—	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
No. 1 Hard.....	15,483	—	15,483	57,402	—	57,402
No. 1 Northern...	28,981,140	4,607,078	33,588,218	50,621,759	4,068,566	55,690,325
No. 2 Northern...	19,849,823	2,703,585	22,553,409	33,920,643	3,856,896	37,777,539
No. 3 Northern...	15,147,257	2,336,034	17,483,291	31,542,214	6,517,685	37,969,899
Sundry grades....	10,866,482	2,382,220	19,248,702	7,059,236	2,554,530	9,614,086
<b>Total Wheat...</b>	<b>80,860,185</b>	<b>12,028,918</b>	<b>92,889,103</b>	<b>123,121,254</b>	<b>17,897,997</b>	<b>141,019,251</b>
Oats.....	16,607,176	8,158,129	24,765,306	39,300,488	5,999,121	45,299,609
Barley.....	6,677,409	1,558,949	8,236,358	10,116,010	1,569,889	11,685,900
Flaxseed.....	713,584	575,451	1,289,035	3,494,641	253,050	3,749,691
Rye.....	1,286,730	21,164	1,307,894	2,081,628	420,468	2,502,097
<b>Total Grain...</b>	<b>106,145,084</b>	<b>22,342,611</b>	<b>128,487,696</b>	<b>178,114,921</b>	<b>26,142,525</b>	<b>204,256,548</b>

**BOUNTIES.**

The only bounties being paid by the Dominion Government in 1921-22 are for the production of crude petroleum, zinc and linen yarns. Bounties on iron and steel ceased in 1911 and on lead in 1918. The total paid on lead bounties from 1899 to 1918 amounted to \$1,979,216 for 1,187,169,878 lb. of lead.<sup>1</sup> For crude petroleum the amount paid in 1921 was \$101,765 on 6,784,333 imperial gallons, being at the rate of 1½ cents per gallon and making the total paid from 1905 to 1921 \$3,119,201 on 207,946,778 gallons. Zinc bounties are granted under the provisions of the Act, 8-9 Geo. V. c. 51, not to exceed \$400,000 to 31st July, 1920. The bounty paid equals the difference between the standard market price of zinc and 9c. per lb. There was paid in 1918-19 the sum of \$108,563 on 10,107,704 lb. of zinc sold; in 1919-20 there was paid \$249,246 on 15,186,694 lb. of zinc sold and in 1920-21 there was paid \$42,191 on 3,635,199 lb. of zinc sold. Total amount paid \$400,000 on 28,929,597 lb.

The total amount of bounties paid from 1896 to 1921 was \$22,657,453; of this amount \$16,785,827 was for iron and steel; \$1,979,216 for lead; \$3,119,201 for crude petroleum (Table 33); \$367,962 for manila fibre; \$400,000 for zinc; and \$5,247 for linen yarns in 1921. The Year Book of 1915, pages 459 and 460, gave a description of the bounties that have been payable since 1883, as well as tables showing for each commodity the quantities on which bounties were annually paid, and the amounts of such bounties for the years 1896 to 1915 inclusive.

**33.—Bounties paid in Canada on Crude Petroleum, 1905-1921.**

Fiscal Year.	Quantity.	Bounty.	Fiscal Year.	Quantity.	Bounty.
	gal.	\$		gal.	\$
1905.....	23,336,478	350,047	1914.....	7,834,219	117,513
1906.....	19,410,480	291,157	1915.....	7,685,127	115,277
1907.....	17,770,205	266,553	1916.....	7,278,452	109,177
1908.....	26,081,139	391,217	1917.....	6,761,885	101,428
1909.....	17,379,871	260,698	1918.....	7,566,457	113,497
1910.....	13,572,587	203,589	1919.....	10,812,482	162,187
1911.....	10,706,418	160,596	1920.....	6,887,498	103,312
1912.....	9,462,380	141,936	1921.....	6,784,333	101,765
1913.....	8,616,767	129,252			
			<b>Total.....</b>	<b>207,946,778</b>	<b>3,119,201</b>

<sup>1</sup>Statistics of bounties paid on lead are given by years on p. 454 of the 1920 Year Book.



### THE COMMERCIAL INTELLIGENCE SERVICE.

The Commercial Intelligence Service maintained by the Department of Trade and Commerce is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in markets, and the current demand or opportunity for Canadian products. They also secure and forward to the Department in Ottawa specific inquiries for Canadian goods and in general exert their best efforts for the development and expansion of overseas markets. These reports, inquiries, etc., are summarized weekly in the Commercial Intelligence Journal issued by the Commercial Intelligence Service at Ottawa, which is supplied gratis to Canadian manufacturers and other interested.

Canadian Government Trade Commissioners are stationed in the United Kingdom at London, Manchester, Liverpool, Bristol and Glasgow. They are also located at Bridgetown, Barbados; Kingston, Jamaica; Buenos Aires; Rio de Janeiro; Shanghai; Havana; Paris; Rotterdam; Milan; Yokohama; Auckland, New Zealand; Cape Town; Calcutta; Singapore and New York. There are in addition Canadian Commercial Agents in Sydney, N.S.W., Christiania and Nassau, Bahamas. Under an arrangement made by the Minister of Trade and Commerce of the Dominion of Canada with the British Foreign Office in 1912, Canadian manufacturers, exporters and others interested in trade matters may secure information and advice from H.B.M. Consuls in Chile, Colombia, Ecuador, Egypt, Mexico, Panama, Peru, Portugal, Spain, Sweden, Switzerland, Uruguay and Venezuela.

### PATENTS, COPYRIGHT, TRADE MARKS, ETC.

**Patents.**—Letters patent, which in England have been in the gift of the Crown from the time of the Statute of Monopolies and beyond, are in Canada a purely statutory grant and have been so from the first. The earliest act is one of Lower Canada, passed in 1824, wherein provision is made for the granting of patent rights to inventors who are British subjects and inhabitants of the province. Upper Canada passed its Act in 1826 and Nova Scotia and New Brunswick passed theirs at later dates. After the Union a consolidating act was passed in 1849, applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial acts and has formed the basis of all succeeding acts.

The Patent Act as it now stands (R.S.C., 1906, c. 69), provides in section 7 that "Any person who has invented any new and useful art, machine, manufacture, or composition of matter, which was not known or used by any other person before his invention thereof, and which has not been in public use or on sale with the consent or allowances of the inventor thereof, for more than one year previous to

his application for patent therefor in Canada, may... obtain a patent granting to such person an exclusive property in such invention." The exclusive right in the patent has duration for eighteen years.

The first Canadian patent was issued under the Lower Canada Act of 1824 to Noah Cushing of Quebec. 165 patents were granted under the Acts of Upper and Lower Canada, and under the consolidating and later Acts of the provinces of Canada 3,169 patents were granted. The growth of invention is shown by the fact that in 1921 alone, 1,645 Canadian patents were issued to Canadians by the Patent office.

Applications for patents in Canada from inventors in other countries were first received in 1872. In that year the total number of applications for patents made to the Canadian Patent Office, Department of Agriculture, was 752, and the total fees amounted to \$18,652. The business of the Office has continued gradually to expand, and the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended March 31, 1913, when 8,681 applications were received, and the total fees amounted to \$218,125. In 1921 there were 13,446 applications with fees amounting to \$344,712. For the fiscal year ended March 31, 1921, the number of patents granted was 11,152. Of the patents granted, 7,744 or 69.44 p.c., were issued to United States inventors, 1,645 to Canadian and 786 to British patentees, while Germany with 287, France with 134 and Australia with 105 patents came next in number of patents issued. Table 34 shows the distribution of the Canadian patentees by province of residence for the years 1912 to 1921.

34.—Number of Canadian Patentees, by Province of Residence, for the fiscal year 1912-1921.

Provinces.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	—	4	2	2	3	3	3	—	9	2
Nova Scotia.....	30	20	39	33	21	29	18	21	29	29
New Brunswick.....	17	25	30	20	17	29	14	9	22	33
Quebec.....	233	277	278	278	237	287	220	172	312	331
Ontario.....	531	584	607	586	540	465	398	386	636	708
Manitoba.....	72	105	115	97	89	84	91	66	86	118
Saskatchewan.....	47	53	59	66	65	62	84	76	94	119
Alberta.....	56	61	46	71	60	59	61	75	116	127
British Columbia.....	97	122	157	126	92	72	83	70	147	177
Territories and Yukon.....	—	—	1	2	1	1	1	—	—	1
<b>Totals.....</b>	<b>1,083</b>	<b>1,256</b>	<b>1,334</b>	<b>1,281</b>	<b>1,125</b>	<b>1,091</b>	<b>973</b>	<b>875</b>	<b>1,451</b>	<b>1,645</b>

It will be seen from the table that the more populous provinces of Ontario and Quebec obtained the largest absolute number of patents, but a calculation of the number of patentees in relation to the census population shows that for the fiscal year 1921 the greatest relative inventiveness was displayed in British Columbia. Thus in this province, in 1921, one patent was granted to every 2,963 persons, the other provinces as regards the number of persons to each patent granted being placed in order as follows: Ontario, 4,144; Yukon, 4,157; Alberta, 4,633; Manitoba, 5,170; Saskatchewan, 6,366; Quebec, 7,134; New Brunswick, 11,754; Nova Scotia, 18,063 and P. E. Island, 44,307.

**Copyrights.**—The first Act of the Province of Canada relating to copyright was passed in 1841 (4-5 Vict., c. 61), allowing copyright to any resident of the Province on depositing with the Provincial Registrar a copy of the work and printing in the work a notice of the entry. In 1842 an Imperial Act (5-6 Vict., c. 45) gave to a work first published in the United Kingdom protection throughout the Empire. As at that time the United States had no agreement with the United Kingdom as to copyrights, United States publishers reprinted in cheap editions books copyrighted in the United Kingdom and many such books naturally found their way into Canada. By the Foreign Reprints Act of 1847 (10-11 Vict., c. 95), the Imperial Government made it possible for Canadians to secure these cheap editions on making provisions safeguarding the rights of the British authors. This was done by Canada in 1850 by an "Act to impose a Duty on Foreign Reprints of British Copyright Works" (13-14 Vict., c. 6) and the duty so imposed was continued by the first Dominion Act of 1868 (31 Vict., chaps. 54 and 56), the latter Act authorizing the Governor-in-Council to impose a duty not exceeding 20 p.c. *ad valorem* on such reprints and to distribute the proceeds among the owners of the copyrights.

By the B.N.A. Act exclusive legislative authority in matters of copyright was assigned to the Dominion Parliament. In 1875 an Act was passed (38 Vict., c. 88) allowing a copyright for 28 years to persons domiciled in Canada or in any British Possession, or who, being citizens of any country having an international copyright agreement with the United Kingdom, had registered their claim and complied with the usual conditions.

In 1886 an International Copyright Act (49-50 Vict., c. 33) was passed by the Imperial Parliament, giving to Queen Victoria the right to accede to the Berne Convention. As Canada thus became a member of the Berne Convention with the privilege of withdrawal, books published in Canada by Canadians secured the same privileges as books published first in the United Kingdom, an author of any country subscribing to the Convention obtaining in any other country in the union the same rights as an author of that country. An Imperial Act of 1911 set forth general copyright regulations for the Empire, but did not extend to any self-governing Dominion unless declared by the Dominion Parliament to be in force therein. No such declaration has been made by the Parliament of Canada.

At the present time copyright protection in Canada and throughout the British Empire in a literary or dramatic work may subsist by virtue of the British Copyright Statutes of 1842 and 1886, on condition that the work is first published within the Empire. The term of this copyright is the life of the author and 7 years after his death or 42 years from the date of first publication, whichever period is the longer.

A copyright restricted to Canada may subsist under the Canadian Copyright Act (R.S.C., 1906, c. 70). The work must be printed or produced and published in Canada and registered before publication. The term of copyright is 28 years, with a renewal period of 14 years in favour of the author if living or of his widow and children if he is dead.

The Copyright Act of 1921, which is not yet effective in Canada, sets down in section 4 of the qualifications for a copyright and in section 5, its duration. "Copyright shall subsist in Canada . . . . . in every original literary, dramatic, musical and artistic work, if the author was at the date of the making of the work a British subject, a citizen or subject of a foreign country which has adhered to the (Berne) Convention and the Additional Protocol . . . or a resident within His Majesty's Dominions. The term for which the copyright shall subsist shall, except as otherwise expressly provided by this Act, be the life of the author and a period of fifty years after his death". Section 13 provides that if at any time the owner of the copyright fails to print the book in Canada and satisfy the reasonable Canadian demand therefor, anyone may apply for a license to the Minister administering the Act, who may, if the owner fails to print an edition, grant a license to the applicant on the latter paying a royalty to the owner.

Copyright protection is extended to records, perforated rolls, cinematographic films or other contrivances by means of which a work may be mechanically performed. The intention of the Act is to enable Canadian authors to obtain full copyright protection throughout all parts of His Majesty's Dominions, foreign countries of the Copyright Union and the United States of America, as well as in Canada.

This Act has not yet been brought into force by Proclamation.

**Copyright, Trade Marks, Etc.**—The report for the year ended March 31, 1921, of the Copyright and Trade Marks Branch of the Department of Trade and Commerce shows that the fees received for copyrights, trade marks, industrial designs and timber marks amounted to \$63,174 for the fiscal year 1920-21, as compared with \$60,451 in 1919-1920, \$40,179 in 1918-19, \$32,265 in 1917-18, and \$28,643 in 1916-17. Registrations of copyright in 1920-21 numbered 1,729 against 2,028 in 1919-20, 1,436 in 1918-19, 1,440 in 1917-18 and 1,384 in 1916-17; of trade marks 2,128 in 1920-21 against 1,735 in 1919-20, 919 in 1918-19, 987 in 1917-18; of industrial designs 316 against 186 and of timber marks 58 against 22.

**Electric Light and Power.**—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the production of electrical energy for export is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until September 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. The statistics published in connection with these Acts are given in Tables 35 and 36.

The statistics of the total electric energy generated in Canada in 1919 and 1920 are contained in Table 37. From these statistics it appears that out of a total production of electrical energy in 1920 amounting to 5,894,732,000 kilowatt hours, 1,019,572,011, or about 17.3 p.c., were exported.



**35.—Number of Electric Light and Power Companies registered under the Electricity Inspection Act in the Fiscal Years, 1913-1921.**

Provinces.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	5	5	6	6	7	7	8	11	11
Nova Scotia.....	36	37	35	35	38	36	37	37	45
New Brunswick.....	25	24	24	24	23	25	25	27	28
Quebec.....	65	70	53	61	79	94	133	140	184
Ontario.....	230	262	282	287	308	317	328	328	371
Manitoba.....	18	16	16	16	18	20	23	23	25
Saskatchewan.....	15	52	54	54	58	59	65	86	93
Alberta.....	28	39	36	36	41	45	47	53	46
British Columbia.....	36	57	55	55	60	60	62	63	77
Yukon.....	2	2	—	—	—	—	—	—	—
<b>Totals.....</b>	<b>460</b>	<b>564</b>	<b>561</b>	<b>574</b>	<b>632</b>	<b>663</b>	<b>728</b>	<b>768</b>	<b>880</b>

**36.—Electrical Energy generated or produced for Export in Canada under authority of the Electricity and Fluid Exportation Act during the Fiscal Years, 1916-1921.**

Companies.	Electric Energy Generated or Produced for Export.					
	1916.	1917.	1918.	1919.	1920.	1921.
	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.
Ontario Power Company of Niagara Falls, Ontario.....	199,135,160	328,442,040	321,768,400	316,921,400	319,362,000	328,256,600
Canadian Niagara Power Company, Niagara Falls, Ontario...	400,521,090	315,227,479	256,005,960	254,633,727	203,601,550	172,251,210
Electrical Development Company (Toronto Power Co.), Niagara Falls, Ontario.....	34,652,000	118,356,500	138,062,000	141,511,000	108,237,000	102,884,000
Ontario and Minnesota Power Company, Fort Frances, Ontario.....	13,144,070	16,572,984	14,225,610	18,060,373	12,043,120	15,803,451
Maine and New Brunswick Electrical Power Company, Ltd., Aroostook Falls, N.B.....	3,075,893	3,459,825	4,190,996	4,954,661	6,122,638	7,877,398
British Columbia Electric Ry. Co., Vancouver, B.C.....	330,626	296,190	327,832	290,530	354,780	385,678
Western Canada Power Co., Vancouver, B.C.....	11,937,700	13,692,820	14,242,756	9,373,700	14,541,734	21,626,236
Sherbrooke Railway and Power Company, Sherbrooke, Que.....	230,820	273,500	118,791	265,378	273,696	281,038
Cedars Rapids Mfg. and Power Co., Cedars Rapids, Que.....	358,753,000	428,390,000	380,635,000	395,966,000	282,225,000	364,432,000
West Kootenay Power and Light Co., Ltd., Rossland, B.C.....	1	1	1	1,301,200	2,997,000	5,774,400
<b>Totals.....</b>	<b>1,021,780,359</b>	<b>1,224,711,338</b>	<b>1,129,577,345</b>	<b>1,143,277,969</b>	<b>949,758,518</b>	<b>1,019,572,011</b>

<sup>1</sup>First exportation in November, 1918.

## 37.—Electrical Energy Generated in 1919 and 1920, by Provinces.

Provinces.	Kilowatt Hours.		Provinces.	Kilowatt Hours.	
	1919.	1920.		1919.	1920.
Prince Edward Island.....	840,000	1,075,000	Saskatchewan.....	43,035,000	47,866,000
Nova Scotia.....	35,088,000	33,731,000	Alberta.....	86,381,000	114,101,000
New Brunswick.....	18,341,000	25,632,000	British Columbia.....	397,880,000	485,177,000
Quebec.....	1,923,560,000	1,914,698,000	Yukon.....	9,538,000	8,332,000
Ontario.....	2,802,886,000	3,056,989,000			
Manitoba.....	179,655,000	207,131,000	<b>Totals.....</b>	<b>5,497,204,000</b>	<b>5,894,732,000</b>

## TRANSPORTATION AND COMMUNICATIONS.

Canada is a country of magnificent distances, nearly 4,000 miles in length from east to west, its relatively small population of 8,788,483 being in the main thinly distributed along the southern borders of its vast area. Different parts of the country are shut off from each other by areas which are almost wildernesses, such as the region lying between New Brunswick and Quebec, and the vast areas north of lakes Huron and Superior, the latter dividing the chief industrial region of Ontario and Quebec from the great agricultural areas of the prairies. To such a country with such a population, producing, like our western agriculturalists, mainly for export, or, like our manufacturers, largely for consumption in distant portions of the country itself, cheap transportation is a necessity of life. Before 1850, when the water routes were the chief avenues of transportation and these were closed by ice for several months, the business of the country may be said to have been during the winter in a state of stagnation or hibernation. The steam railway was therefore required for the adequate economic development of Canada, more particularly for linking up with the economic and industrial world the vast productive areas of the Canadian west, and thus promoting their development. The construction of the Canadian Pacific railway gave to Canada as an economic unit length, but it was "length without breadth." The building of the newer transcontinental railways has for the first time given the country breadth—a fact which in another ten years, as settlement fills the extensive areas thus opened up, will be more evident than it is to-day.

Railway transportation, though in many parts of the country essential, is nevertheless expensive, particularly in these last few years, and for bulky and weighty commodities. Hence new enterprises have either been undertaken or are under consideration for improving water communication, such as the new and deeper Welland canal, the deepening of the St. Lawrence canals, and of the channel between Montreal and Quebec, and the utilization of the Hudson Bay route for the transportation of western grain to the British and continental European markets.

Problems of transportation are, therefore, of vital importance in the economic life of Canada, occupying a large part of the time and thought of our Parliaments and public men. Scarcely less important,

from the social and from the economic point of view, is the development of methods of communication, in a country so vast and so thinly peopled. The post office has been a great, though little recognized, factor in promoting solidarity among the people of different parts of the Dominion, while telegraphs and telephones have gone far to annihilate distance, the rural telephone, in particular, having been of great social and economic benefit in country districts. That the use of the automobile has also been of great benefit in promoting social intercourse among the dwellers in rural districts is evidenced by the fact that in Ontario alone, 64,045 passenger cars were owned by farmers in 1921. The press, again, assisted by cheap telegraph and cable rates, and reaching through the mails all over the country, has been of great use in developing national sentiment. To sum up, it may be said that the progress of modern inventions, not least among which is the radiophone, now coming into use, is going far to eliminate that isolation and loneliness which in the past were such characteristic features of Canadian rural life, and have thrown their gloomy shadow across the pages of Canadian literature.

The statistics of transportation and communications comprised in this section include those of steam and electric railways, motor vehicles, express companies, canals, shipping, telegraphs, telephones and Post Office. The statistics of railways and canals, telegraphs, telephones and express companies, are taken from the reports of the Transportation Branch, Dominion Bureau of Statistics. The shipping statistics are taken from the Report of the Department of Marine and Fisheries and the Shipping Report issued by the Department of Customs. The postal statistics are from the Report of the Post Office Department.

### STEAM RAILWAYS.

**Historical.**—The first Canadian railway was constructed in 1836, between St. Johns, Quebec, and La Prairie, with the object of shortening the journey between Montreal and New York. It was only 16 miles long and was operated by horses, for which locomotives were substituted in 1837. A second railway from Montreal to Lachine was opened in 1847, and a third line to St. Hyacinthe in 1848. In 1850, however, there were only 66 miles of railway in all Canada.

The railway era in Canada may be said to have begun in 1851, when an Act was passed providing for the construction of a main line of railway between the two Canadas. The result was the completion of the Grand Trunk railway between Montreal and Toronto in 1856, its extension westward to Sarnia in 1859, and eastward to Rivière du Loup in 1860. The Atlantic and St. Lawrence railway from Portland, Maine, to the Canadian boundary, was leased for 999 years, and in 1859, on the completion of the Victoria Bridge across the St. Lawrence at Montreal, the Grand Trunk had a through route 800 miles long from Portland to Sarnia. A line from Detroit to Port Huron was leased in 1859, the Champlain roads in 1863, the Buffalo and Lake Huron in 1867, while the Chicago and Grand Trunk was completed from Port Huron to Chicago in 1880. In 1881 the

Georgian Bay and Lake Erie system with 171 miles was incorporated, and in the following year the amalgamation with the Great Western (904 miles) took place, and the Midland system (473 miles) was incorporated into the Grand Trunk. In 1888 the Northern railway, which had been opened from Toronto to Barrie in 1853, and the Hamilton and Northwestern railway, were taken over by the Grand Trunk. In 1891 the completion of the St. Clair tunnel gave direct communication with the railways of the United States. In the seventies the gauge had been changed from the original 5' 6" to the standard gauge of 4' 8½".

The Intercolonial railway between the Maritime Provinces and Canada had been proposed as early as the thirties. In 1844 the Imperial Government made a survey for a military road, and in 1851 agreed to recommend to Parliament either a guarantee of interest or an advance of the sum required to build a railroad. Differences of opinion as to route resulted in the project falling through, but in 1853 Nova Scotia undertook to construct by 1862 a trunk line from Halifax to the New Brunswick frontier, with branch lines to Pictou and Victoria Beach. In both Nova Scotia and New Brunswick, however, the scheme of an Intercolonial railway broke down for lack of funds, and in 1867 there were only 341 miles of railway in the Maritimes—196 miles in New Brunswick, including lines from St. John to Shediac and from St. Andrews to Richmond; 145 miles in Nova Scotia, including lines from Halifax to Truro and Windsor, and from Truro to Pictou. These under the B.N.A. Act passed to the Dominion Government. The latter on its part undertook the completion of the railway, and in 1876 the line was opened. In 1879 the Rivière du Loup branch of the Grand Trunk was acquired, and in 1898 the Drummond Counties Railway from Chaudière Junction to Ste. Rosalie Junction was leased and running rights obtained from the latter point over the Grand Trunk tracks into Montreal, the Intercolonial thus becoming a competitor for the business of the commercial metropolis of Canada.

As early as 1849 a pamphlet published by Major Carmichael-Smyth advocated the construction of a Canadian Pacific railway nearly along the present route. In 1851 a Parliamentary Committee reported against the undertaking of the enterprise at that time. In 1871 the terms under which British Columbia entered Confederation pledged the Dominion to commence the Pacific Railway within two years, and complete it within ten years. The work of construction of the railway as a public work actually commenced in 1874, but was not very rapidly pushed forward. In 1880 the Government entered into a contract with the Canadian Pacific Railway Syndicate, granting to the syndicate all portions of the line completed or under construction, a cash subsidy of \$25,000,000 and a land grant of 25,000,000 acres, free admission of materials for construction, and protection for 20 years against competing lines. The company on its side agreed to complete the railway to a fixed standard by May 1, 1891, and thereafter to maintain it efficiently. As a matter of fact the last spike on the main line was driven on Nov. 7, 1885. Like the Grand Trunk,



the Canadian Pacific railway now began to acquire small branch lines as feeders; among them being the North Shore, Quebec, Montreal, Ottawa and Ontario in 1881, the Winnipeg to Manitou line in 1882, the Ontario and Quebec, the Credit Valley and the Toronto, Grey and Bruce in 1883, the St. Lawrence and Ottawa and Manitoba Southwestern, 1884, the North Shore, Nova Scotia, in 1885, the Atlantic and Northwest, 1886, the West Ontario Pacific, 1887, the Sudbury and Sault Ste. Marie, 1888, the New Brunswick railway, the Columbia and Kootenay in 1890, the Montreal and Ottawa and Montreal and Lake Maskinonge in 1892.

The second transcontinental railway, the Canadian Northern, was begun in 1896 with the completion by Mackenzie and Mann of the 125 mile line of the Lake Manitoba Railway and Canal Company, chartered in 1889. Next were acquired the charters of the Winnipeg and Hudson Bay, the Manitoba and Southeastern, the Ontario and Rainy River, and the Port Arthur, Duluth and Western. Assisted by the Manitoba Government, which desired to establish competition with the Canadian Pacific railway, the Canadian Northern next secured the Manitoba lines of the Northern Pacific, and in 1902 completed its line from Winnipeg to Port Arthur. By securing guarantees of bonds from the Dominion and Provincial Governments it was enabled to complete the great scheme of a transcontinental road, opening up in Ontario and in the West large undeveloped areas which are now in process of settlement.

Before the continental ambitions of the Canadian Northern were generally understood, the question came up of building an additional transcontinental line. About the end of the century, the Grand Trunk began to look with envy at the large and increasing revenues drawn by the Canadian Pacific Railway from the great Northwest. In 1902, the Grand Trunk submitted to the Dominion Government a proposition to construct a line from North Bay to the Pacific Coast, provided that a grant of \$6,400 and 5,000 acres of land per mile should be made. The Government in 1903 submitted a counter-proposition that the line, instead of terminating at North Bay, should be continued east to Moncton, New Brunswick, the eastern section from Moncton to Winnipeg to be constructed by the Government and leased to the Grand Trunk for a fifty-year period, the railway paying no rent for the first seven years and 3 p.c. on the cost of the railway for the remaining 43 years. The western half of the railway from Winnipeg to Prince Rupert was to be built by the Grand Trunk, the Government guaranteeing interest on bonds to 75 p.c. of the cost of construction, not exceeding \$13,000 per mile on the prairie section and \$30,000 per mile on the mountain section. This proposition was accepted and construction commenced on the National Transcontinental and the Grand Trunk Pacific.

With two new transcontinental main lines besides branches under construction, Canadian railway mileage was doubled between 1900 and 1915, increasing from 17,657 miles in the former year to 35,582 miles in the latter. The builders of the new lines, as well as the Canadian Government and people, had expected that immigration

of capital and labour from Europe would rapidly settle the areas tributary to the new railroads and give them abundant and lucrative traffic, as had been the case with the C.P.R. Instead the war came, and European labour and capital were conscripted for the struggle, immigration fell off, while cost of operation increased, owing to the scarcity of labour and material in Canada. The interest on the bonds had to be met, and in 1915 the Government felt it necessary to give assistance to the railways. In 1916, after having again made a loan to the Grand Trunk Pacific railway and the Canadian Northern Railway Company, a Royal Commission was appointed by Order in Council of July 13, 1916, to investigate: (1) the general problem of transportation, (2) the status of each of the three transcontinental systems, (3) the reorganization of any of the said systems, or their acquisition by the State and (4) other matters considered by the Commission to be relevant to the general scope of the inquiry. Alfred Holland Smith of New York, Sir Henry Drayton of Ottawa and Sir George Paish of London, England, were originally appointed to the Commission. On the resignation of the latter, William M. Acworth was appointed to take his place. The majority report of the Commission, which was signed by Sir Henry Drayton and Mr. Acworth, has formed the basis of the subsequent railway policy of Canada. Their recommendation was that the public should take control of the Canadian Northern, of the Grand Trunk Pacific and of the Grand Trunk proper; and that they should be administered on purely business principles by a Board of Trustees, such compensation as seemed proper to be decided by arbitration and given to the shareholders of the Canadian Northern and the Grand Trunk.

**Canadian Government Railways.**—The Intercolonial Railway, built as a condition of Confederation and completed in 1876, and the Prince Edward Island railway opened in April, 1875, have since their construction been owned and operated by the Dominion Government. In 1903 the Dominion Government undertook the construction of the eastern division of the National Transcontinental railway from Moncton, N.B., to Winnipeg, to be leased to the Grand Trunk Pacific Railway Company for a period of 50 years. On the failure of the latter company to take over the operation of the road when completed in 1915, the Government itself undertook its operation—expenditure up to March 31, 1921, \$167,812,568. (Table 18). Thus on March 31, 1918, the Canadian Government railways had a total mileage of 5,150.08, comprising the Intercolonial railway, 2,305.23 miles; St. John and Quebec railway, leased under authority of Chapter 49 of the Statutes of 1912, 127.72 miles; Prince Edward Island railway, 313.82 miles; and National Transcontinental railway, 2,403.31 miles. Under Orders in Council of May 22, 1918, and August 30, 1918, the Moncton and Buctouche, the Elgin and Havelock, St. Martin's railway, the York and Carleton railway and the Salisbury and Albert railway were taken over. Also, under Order in Council of December 1, 1919, the Lotbinière and Megantic railway; under Order in Council of June 10, 1920, the Caraquet and Gulf

Shore railway and under Order in Council of June 12, 1920, the Cape Breton railway, were incorporated in the Government railway system. The Hudson Bay railway with 332.5 miles of steel rail at the end of 1920, and 214 miles operated, out of its total length of 424 miles, has been declared to be comprised in the Canadian Government railways and is being operated to a limited extent by the board of directors of the Canadian Northern Railway. Its cost to Mar. 31, 1922, was \$20,536,106, of which \$14,346,116 was chargeable to the railway and \$6,189,990 to the terminals at port Nelson. During the calendar year 1921 its gross earnings were \$29,475, its working expenses \$101,396—a deficiency of \$71,921.

*Canadian Northern Railway.*—In pursuance of an Act passed in 1917 (7-8 George V, c. 24), intituled an Act providing for the acquisition by His Majesty of the capital stock of the Canadian Northern Railway Company, and an agreement entered into under the Act, the Government acquired the entire capital stock of the Canadian Northern Railway Company, except five shares issued in exchange for Canadian Northern Railway income charge convertible debenture stock. Having thus acquired control, the Government, in September, 1918, appointed a new board of directors of the Canadian Northern Railway Company. This board, under Order in Council of November 20, 1918, became also a board of management of the Canadian Government railways, with all the powers theretofore vested in the general manager of the Canadian Government railways. The use of the general term "Canadian Government Railways" to describe both systems was authorized by Order in Council of December 20, 1918, the corporate entity of each system being, however, preserved. The Canadian Northern system, at the time of its acquisition by the Government, had a total mileage of 9,566.5 miles.

*The Grand Trunk Pacific.*—During 1916, 1917 and 1918, the Grand Trunk Pacific received advances from the Government totalling \$19,639,837 to enable it to "carry on" during difficult times. Towards the close of the fiscal year 1918-19, approximately \$950,000 of the \$7,500,000 authorized in the estimates of that year remained unexpended. The company desired to use this to pay interest on Grand Trunk Pacific Debenture Stock, but the Government insisted that deficits in operation should have priority over all other charges, and made the remittance conditional upon that understanding. As a result, the company notified the Government that it would be unable to meet the interest due on its securities on March 1, 1919. This was followed on March 4, by a notification from the company that it would be unable to continue operation of the railway after March 10. As it was necessary in the interests of the immense territories served by the railway to maintain the operation of the railroad, the Minister of Railways was appointed receiver from midnight of March 9, and for a time the road was operated apart from the Canadian National Railways. In October, 1920, the management was transferred to the Canadian National Railways, and 1921 was the first complete year of the operation of this road as an integral part of the Canadian National System.



*The Grand Trunk.*—The desire of the parent organization, the Grand Trunk, to be relieved of its obligations in respect of the Grand Trunk Pacific, led to negotiations early in 1918 for the taking over and inclusion of the Grand Trunk in the Government system of railways. These continued until October, 1919, and resulted in Chapter 17 of the 2nd Session of that year, an Act to acquire the Grand Trunk Railway System. This legislation provided for the sale and purchase of the preference and common stock, the value of which was to be determined by arbitration. On certain other stocks, namely, the 4 p.c. guaranteed stock and the debenture stocks, the Government agreed to guarantee the payment of dividends and interest, provided the voting powers exercised by the shareholders should cease on the provision of the guarantees. The guarantees were to take effect on the appointment of a committee of management representative of both the company and the Government. The committee of management, which consisted of C. A. Hayes and S. J. Hungerford, representing the Canadian National Railways, W. D. Robb and Frank Scott, representing the Grand Trunk, with President Howard G. Kelley, of the Grand Trunk, as chairman, held its first meeting on May 21, 1920, from which date the Government assumed its liability under the Act already referred to. The arbitrators appointed were Sir Walter Cassels, Chairman; Sir Thomas White, for the Government; and Hon. W. H. Taft, for the Grand Trunk. The arbitration proceedings commenced on February 1, 1921. The agreement under the Grand Trunk Acquisition Act limited the time for the completion of the arbitration proceedings to nine months from the date of the appointment of the arbitrators. The arbitrators had been appointed on July 9, 1920, and the arbitration proceedings had not been completed when the proceedings lapsed on April 9, 1921.

This difficulty led to further delay, and to reinstate the arbitration proceedings necessitated more legislation. With this in view, an Act respecting the Grand Trunk arbitration was put through and became law on May 3, 1921. This legislation provided for the reviving of the arbitration proceedings, conditional upon the resignation of the Grand Trunk English directorate, the substitution of a Canadian Board, and the establishment of the head office in Canada. The English directors resigned on May 26, and the Canadian Board was appointed, as follows:—Sir Joseph Flavelle, Bart., Toronto; Howard G. Kelley, Montreal; A. J. Mitchell, Toronto; E. L. Newcombe, K.C., Ottawa; and J. N. Dupuis, Montreal. The arbitration proceedings were revived on June 1, and the hearing finally concluded on July 8. The award was made on Sept. 7, the chairman, Sir Walter Cassels, and Sir Thomas White holding that the preference and common stocks of the Grand Trunk Company had no value in view of the financial condition of the Grand Trunk, consequent upon its Grand Trunk Pacific entanglements. Hon. W. H. Taft dissented from this finding, holding that the securities in question should be valued at not less than \$48,000,000, his contention being that the preference and common stocks would be earning dividends in five



years' time. The acquisition agreement provided for an appeal on a point of law, and as the majority of the arbitrators had declined to hear evidence as to replacement value of the physical property of the system, an appeal was made to the Judicial Committee of the Privy Council. This appeal was dismissed on July 28, 1922.

The Grand Trunk lines, both in Canada and United States, are now Government-owned and are being operated in close co-ordination with the Canadian National Railways, but under separate management pending the taking over of operations by the new board of directors of the Canadian National Railways, whose appointment was announced by the Prime Minister on October 4, 1922. The new Board will have control of the unified management and operation of all Canadian Government railways.

*Quebec Bridge.*—The Quebec Bridge was built by the Dominion Government to replace the structure which fell during the erection in 1907. The contract for the substructure was let in 1909, and for the superstructure in 1911. The bridge was opened for traffic in October, 1917, although not entirely completed until August, 1918. It was officially opened by H.R.H. the Prince of Wales, on August 22, 1919. The main span is the longest in the world, being 1,800 feet centre to centre of piers, or 100 feet longer than that of the Forth Bridge in Scotland. The total cost of this structure to March 31, 1921, was \$14,831,175. The bridge is of the cantilever type and carries a double track railway and accommodation for foot traffic, but no highway. The bridge forms a connecting link in the Canadian National Railway system, and is operated as a part of such systems.

*Summary.*—The operating mileage of the Canadian Government lines at December 31, 1921, was 17,338 miles. The gross earnings during 1921 amounted to \$126,691,456, the operating expenses to \$142,784,357, involving a loss on the operation of the system of \$16,092,901 for the year as compared with \$36,842,970 for 1920, or an improvement as compared with 1920, of \$20,750,069. The Grand Trunk system, which is to be consolidated with the Canadian Government lines, has an operated mileage of 4,776. Its operating revenue (including the Central Vermont Railway system which is controlled by the Grand Trunk) was in the calendar year 1921, \$109,097,558 as compared with operating expenses of \$104,725,040, leaving a net revenue from railway operation of \$4,372,518, a slight improvement as compared with the preceding year.<sup>1</sup>

#### **The Board of Railway Commissioners for Canada.**

In the early days of railway building in Canada, the provinces were more concerned with rapid development than with rate regulation. Under the Railway Clauses Consolidation Act of 1851, rates were fixed by the directors of the railway, subject to the approval of the Governor in Council. Beyond this, competition was relied upon to bring rates to a reasonable level. As time went on, however, those

<sup>1</sup> For detailed statistics of the operation of Government lines of railway in 1921, see the annual statement by the Minister of Railways and Canals in Hansard of April 11, 1922.

who believed in the efficacy of competition as a regulator were disillusioned. For example, complaints were made that the Grand Trunk gave low through transit rates, say from Chicago to New York, through Canada, and recouped itself by high non-competitive rates in Upper Canada. In 1888 the supervision of rates was given to the Railway Committee of the Privy Council, sitting in Ottawa.

At the turn of the century, two reports were prepared for the Department of Railways and Canals by Professor S. J. McLean, the first setting down the experience of railway commissions in England and the United States, and the second discussing Canadian rate grievances with a recommendation that regulation by commission be adopted in Canada. The second report found that non-competitive rates were exorbitant as compared with competitive ones and that the railways had exercised their right to vary rates without notice, to the great distress of shippers. Among the weaknesses of the Railway Committee as a rate regulating body was its fixed station at Ottawa, which made the cost of appearing before it practically prohibitive. Besides, members of Parliament had no necessary aptitude for dealing with railway rates, and of their two functions—political and administrative—the political was to them the more important.

The Board of Railway Commissioners for Canada, as provided for by the amended Railway Act of 1903, was organized on February 1, 1904. In the beginning, its membership consisted of a Chief Commissioner, a Deputy Chief and one Commissioner. In 1908 the membership was increased by the inclusion of an Assistant Chief Commissioner and two other Commissioners. According to the Act, the Board may be divided into two sections of three, but since any two members constitute a quorum, two commissioners usually hear all but the more important cases, and, agreeing, give the decision of the Board.

The powers of the Commission, in brief, are in matters relating to the location, construction and operation of railways. The most important of these powers has to do with rate regulation. Passenger rates are divided into standard and special, freight rates into standard, special and competitive. Standard rates are maximum rates and the only ones which must be approved by the Board before they are applied. Special and competitive rates, being less than maximum rates, may be applied by railways without the Board's approval, provided that a change of rates has been advertised. But important rate adjustments usually come to the notice of the Commission, for he changed rate alters the extent of the territory in which a shipper can compete and on this account he is apt to appeal the case to the Commission. It is a knotty question to mark the boundaries of competitive areas—to decide whether Nova Scotian manufacturers should be given rates which will allow them to compete west of Montreal, or again, whether high construction and operation costs in British Columbia should enforce a rate which prevents her goods from moving far into the prairies. By an amendment to the Railway Act, the regulation of telephone, telegraph and express rates was given to

the Commission, but with narrower powers than were given to it in dealing with railways.

The procedure of the Board is informal as suits the nature of its work, for experience has shown that hearings in strict legal form give the parties to the argument uncompromising attitudes. If possible, matters are settled by recommendations to the railway company or the shipper; thus, during 1921, 88 p.c. of the applications to the Board were settled without formal hearing. The Railway Committee had kept its station at Ottawa, giving only formal hearings, so that the grievances of those who could not afford to appear in person or pay a counsel went unredressed. The itineraries of the Railway Commission are arranged so that evidence may be taken at the least expense to those giving it.

Any one of the Chief, Assistant or Deputy Chief Commissioners, depending upon which one is presiding, gives final judgment on points of law. On questions of fact the findings of the Board are final and are not qualified by previous judgments of any other court. Questions of law and jurisdiction are differentiated. In the first case, the Board may, if it wishes, allow an appeal to the Supreme Court; in the second the applicant needs no permission to present his appeal.

The Railway Committee of the Privy Council being a committee of the Cabinet was responsible to Parliament. When the powers of the Committee were made over to the Railway Commission the responsibility was retained but necessarily by a different means. There is now provision for an appeal from any decision to the Governor in Council, who may also of his own motion interfere to rescind or vary the action of the Board, but the power to rescind or vary usually consists in referring a matter to the Board for reconsideration. In the period 1904 to 1918 there were appeals from 62 of the 6,900 cases given formal hearing, which is to say 0.9 p.c., and of these less than one-sixth have been granted.

#### Statistics of Steam Railways.

**Mileage of Steam Railways.**—The increase in the steam railway mileage of Canada for the calendar year 1920 was 326 miles, the largest increase since 1917. On December 31, 1920, the total railway mileage in operation was 39,384. Until 1919 the railway year ended on June 30, but in that year it was changed to the calendar year, consequently in most of the tables 1919 appears twice. Table 1 records the steam railway mileage in Canada as at the end of each railway year from 1835 to 1920, and Table 2 the steam railway mileage of Canada by provinces, as at the end of each railway year from 1914 to 1920.

**Capital Liability of Steam Railways.**—The capitalization of the steam railways of Canada as at the end of the railway years 1876 to 1920 is given in Table 3. In the latter year the total capitalization was \$2,170,030,128. This amount included \$1,323,705,962 of stock and consolidated debenture stock, and \$846,324,166 of funded debt.



**Statistics of Individual Companies.**—Table 4 gives the mileage, capital liability (including funded debt), earnings and operating expenses of the steam railways of Canada for the calendar year 1920. The aggregate earnings were \$492,101,104, as compared with operating expenses of \$478,248,154, an operating ratio which is shown by Table 5 to have been 97.18 per cent.

**Passenger and Freight Traffic.**—Tables 5 and 8 present analytically the statistics of railway passenger and freight traffic in Canada during recent years. Table 5 shows that the ratio of operating expenses to receipts in 1920 was the most unfavourable of any year since 1901, largely on account of the tremendous wage bill for the year, as given in Table 9. Table 6 shows gross earnings, operating expenses and net earnings per mile of line and gross earnings and operating expenses per train mile. Table 7 shows the distribution of the operating expenses of steam railways for the last four railway years, while Table 8 gives a summary analysis of passenger traffic and freight traffic since 1910, and Table 9 shows the number of employees, their salaries and wages and the ratio of the latter to gross earnings and operating expenses for the railway years from 1907 to 1920. Table 10 gives statistics of mileage and railway stock from 1916 to 1920, and Tables 11 and 12 give the tonnage of the chief commodities hauled as freight on steam railways between 1917 and 1920, the last year being under a new classification of commodities.

**Government Aid to Private Railways.**—In order that the private railways of Canada might be constructed in advance of settlement as colonization roads or through thinly-settled districts where little traffic was available, it was necessary for Dominion, Provincial and even Municipal Governments to extend some form of assistance. In our earlier history, when our Governments had plenty of Crown land and little cash, the subsidies granted to railways frequently took the form of land grants, which had the advantage of giving the railway a direct interest in opening up the country, though it sometimes led to the railways holding large tracts of land idle for speculative purposes when intermixed Crown lands had been homesteaded, thus retarding the settlement of agricultural land. Table 13 shows the areas of the land granted as subsidies to steam railway companies by the Dominion and Provincial Governments, with the names of the companies in the case of the Dominion Government. The total area so granted up to Dec. 31, 1920, extends to 58,121,916 acres.

As the country grew wealthier, the objections to the land grant method became more apparent, and aid was more frequently given in the form of a cash subsidy per mile of line, a loan, or a subscription to the shares of the railway. From 1851 up to Dec. 31, 1920, as shown analytically in Table 14, the total value of such aid granted to steam railways in Canada, exclusive of the capital of two Government railways (I.C.R. and P.E.I.R.), amounted to \$281,771,322. Of this sum \$221,911,278 represents aid granted by the Dominion



Government, \$43,469,371 that granted by the Provincial Governments, and \$16,390,673, that granted by municipalities. Table 15 records the details of the most recent type of assistance given to private railways, viz., by the guaranteeing of their bonds or of the interest thereupon. These guarantees enabled the railways receiving them to borrow money, generally from British investors, at rates of interest considerably lower than would otherwise have had to be paid. Up to Dec. 31, 1920, guarantees amounting to \$455,813,641 had been authorized by the Dominion and Provincial Governments, and guarantees amounting to \$399,183,329 had actually been earned by the railways concerned.

**Government Expenditure on Construction of Government Steam Railways.**—In Table 16 are given statistics of the cost of construction (capital expenditure), the working expenses, revenue, and operating surplus or deficit of Canadian Government-owned railways by years since their commencement, with totals to the end of 1920. In Table 17 this total capital expenditure is divided up according to the railway lines on which the money was spent.

**Railway Accidents.**—In the past few years the attention of the public has been directed by the "safety first" movement to the prevention of accidents on railways as well as in manufacturing establishments. Table 18 gives in a summary form the statistics of accidents occurring in connection with steam railways in Canada from 1888 to 1920, while Table 19 includes the details of the accidents which took place during the last three railway years for which statistics are available.

1.—Record of Steam Railway Mileage, June 30, 1835-1919, and Dec. 31, 1919-1920.

Year.	Number of miles in operation.	Year.	Number of miles in operation.	Year.	Number of miles in operation.	Year.	Number of miles in operation.
1835.....	—	1857.....	1,444	1879.....	6,858	1901.....	18,140
1836.....	16	1858.....	1,863	1880.....	7,194	1902.....	18,714
1837.....	16	1859.....	1,994	1881.....	7,331	1903.....	18,985
1838.....	16	1860.....	2,065	1882.....	8,697	1904.....	19,431
1839.....	16	1861.....	2,146	1883.....	9,577	1905.....	20,487
1840.....	16	1862.....	2,189	1884.....	10,273	1906.....	21,353
1841.....	16	1863.....	2,189	1885.....	10,773	1907.....	22,452
1842.....	16	1864.....	2,189	1886.....	11,793	1908.....	22,966
1843.....	16	1865.....	2,240	1887.....	12,184	1909.....	24,104
1844.....	16	1866.....	2,278	1888.....	12,163	1910.....	24,731
1845.....	16	1867.....	2,278	1889.....	12,628	1911.....	25,400
1846.....	16	1868.....	2,270	1890.....	13,151	1912.....	26,727
1847.....	54	1869.....	2,524	1891.....	13,838	1913.....	29,304
1848.....	54	1870.....	2,617	1892.....	14,564	1914.....	30,795
1849.....	54	1871.....	2,695	1893.....	15,005	1915.....	35,582
1850.....	66	1872.....	2,899	1894.....	15,627	1916.....	37,434
1851.....	159	1873.....	3,832	1895.....	15,977	1917.....	38,604
1852.....	205	1874.....	4,331	1896.....	16,270	1918.....	38,879
1853.....	506	1875.....	4,084	1897.....	16,550	1919.....	38,896
1854.....	764	1876.....	5,218	1898.....	16,870	1919.....	39,058
1855.....	877	1877.....	5,782	1899.....	17,250	1920.....	39,384
1856.....	1,414	1878.....	6,226	1900.....	17,657		

## 2.—Steam Railway Mileage by Provinces, June 30, 1914-1919, and Dec. 31, 1919-1920.

Provinces.	June 30.						Dec. 31.	
	1914.	1915.	1916.	1917.	1918.	1919.	1919.	1920.
Ontario.....	9,255	10,702	11,320	11,049	11,057	11,000	10,988	11,001
Quebec.....	4,043	4,677	4,733	4,734	4,791	4,860	4,877	4,941
Manitoba.....	4,076	4,498	4,309	4,194	4,168	4,190	4,193	4,403
Saskatchewan.....	5,089	5,327	5,378	6,124	6,162	6,148	6,141	6,220
Alberta.....	2,545	3,174	3,894	4,444	4,273	4,285	4,354	4,474
British Columbia.....	1,978	3,100	3,604	3,885	4,247	4,238	4,287	4,325
New Brunswick.....	1,839	1,962	1,957	1,959	1,959	1,948	1,993	1,816
Nova Scotia.....	1,365	1,367	1,436	1,422	1,428	1,432	1,435	1,438
Prince Edward Island.....	279	275	275	278	279	279	276	279
Yukon.....	102	102	102	102	102	102	100	69
In United States.....	224	398	426	413	413	414	414	418
<b>Canada.....</b>	<b>30,795</b>	<b>35,582</b>	<b>37,434</b>	<b>38,604</b>	<b>38,879</b>	<b>38,896</b>	<b>39,058</b>	<b>39,384</b>

NOTE.—The mileage shown in the United States relates entirely to lines which cross American territory in passing from one point in Canada to another; such lines, although not heretofore included in Canadian mileage, are operated wholly for the purposes of Canadian traffic. There is a large additional mileage in the United States, which is owned and operated by Canadian railways, but of which no account is taken in these statistics.

## 3.—Capital Liability of Steam Railways, June 30, 1876-1919, and Dec. 31, 1919-1920.

Year.	Stocks.	Funded Debt.	Total.	Year.	Stocks.	Funded Debt.	Total.
	\$	\$	\$		\$	\$	\$
1876.....	180,955,657	76,079,531	257,035,188	1899.....	391,300,360	362,053,495	753,353,855
1877.....	182,578,994	79,676,382	262,255,376	1900.....	410,326,095	373,716,704	784,042,799
1878.....	191,331,767	83,710,938	275,042,705	1901.....	424,414,314	381,696,523	816,110,837
1879.....	192,674,553	81,151,628	273,826,181	1902.....	460,401,863	404,806,847	865,208,710
1880.....	189,956,177	80,661,316	270,617,493	1903.....	483,770,312	424,100,762	907,871,074
1881.....	199,527,981	84,891,313	284,419,294	1904.....	492,752,530	449,114,035	941,866,565
1882.....	214,468,465	92,487,932	306,956,397	1905.....	526,353,951	465,543,967	991,897,918
1883.....	269,092,615	102,134,295	371,226,910	1906.....	561,655,395	504,226,234	1,065,881,629
1884.....	285,077,822	109,310,963	394,388,785	1907.....	588,568,591	583,369,217	1,171,937,808
1885.....	312,182,162	141,370,963	453,553,125	1908.....	607,891,349	631,869,664	1,239,761,013
1886.....	317,141,948	169,359,306	486,501,254	1909.....	647,534,647	660,946,769	1,308,481,416
1887.....	324,128,738	194,801,553	518,930,291	1910.....	687,557,387	722,740,300	1,410,297,687
1888.....	327,493,882	228,617,728	556,111,610	1911.....	749,207,687	779,481,514	1,528,689,201
1889.....	332,559,672	251,675,226	584,234,898	1912.....	770,459,351	818,478,175	1,588,937,526
1890.....	338,177,386	266,885,707	605,063,093	1913.....	918,573,740 <sup>1</sup>	613,256,952	1,531,830,692 <sup>1</sup>
1891.....	339,769,786	292,291,654	632,061,440	1914.....	1,026,418,123 <sup>1</sup>	782,402,638	1,808,820,761 <sup>1</sup>
1892.....	344,400,282	305,120,200	649,520,482	1915.....	1,024,085,983 <sup>1</sup>	851,724,905	1,875,810,888 <sup>1</sup>
1893.....	371,877,287	307,225,888	679,103,175	1916.....	1,024,264,325 <sup>1</sup>	868,861,449	1,893,125,774 <sup>1</sup>
1894.....	361,760,508 <sup>1</sup>	327,003,803	688,764,311	1917.....	1,089,114,875 <sup>1</sup>	896,005,116	1,985,119,991 <sup>1</sup>
1895.....	361,449,590	330,785,546	692,235,136	1918.....	1,093,885,495 <sup>1</sup>	905,994,999	1,999,880,494 <sup>1</sup>
1896.....	361,075,340	336,137,601	697,212,941	1919.....	1,100,301,195 <sup>1</sup>	914,823,515	2,015,124,710 <sup>1</sup>
1897.....	367,611,048	348,834,086	716,445,134	1919.....	1,104,409,122 <sup>1</sup>	931,756,484	2,036,165,606 <sup>1</sup>
1898.....	378,151,790	354,946,865	733,098,655	1920.....	1,323,705,962 <sup>1</sup>	846,324,166	2,170,030,128 <sup>1</sup>

<sup>1</sup>Including consolidated debenture stock of the Canadian Pacific Railway, \$163,257,224 in 1913, \$173,307,470 in 1914, \$176,284,882 in 1915 and 1916, \$216,284,882 in 1917, 1918, 1919, and \$435,294,722 in 1920 for C.P.R. and other roads.

#### 4.—Mileage, Capital Liability, Earnings and Operating Expenses of Steam Railways for the Calendar Year 1920.

Name of Railway.	Miles operated.	Capital Liability.	Earnings.	Operating expenses.
	No.	\$	\$	\$
Algoma Eastern.....	89-45	5,630,000	1,194,612	747,666
Algoma Central and Hudson Bay.....	346-20	20,504,800	2,646,304	2,409,538
Atlantic, Quebec and Western.....	104-50	6,598,675	280,910	349,828
Alberta and Great Waterways.....	120-70	7,450,000	151,373	235,017
British Yukon.....	101-12	4,978,879	184,362	132,117
Brandon, Saskatchewan and Hudson Bay.....	69-45	2,150,000	84,826	223,367
Canada and Gulf Terminal.....	38-40	1,740,000	149,334	100,748
Canada Southern.....	380-54	37,630,000	23,149,990	17,243,773
Canadian National:—				
Canadian Govt. Rys.....	4,359-96	—	44,537,804	54,987,680
St. John and Quebec.....	172-07	8,954,395	265,242	457,971
Canadian Northern.....	9,586-40	449,327,041	65,103,916	81,544,331
Canadian Pacific, including leased lines.....	13,308-30	630,473,748	217,665,474	182,312,967
Cape Breton.....	—	1,000,000	12,278	20,924
Caraquet and Gulf Shore.....	—	1,750,000	—	—
Central Canada.....	48-50	2,625,000	48,591	135,322
Central Vermont.....	125-36	2,161,915	550,294	486,800
Crows Nest Southern.....	74-18	4,295,000	409,764	426,937
Cumberland Railway and Coal Co.....	32-00	—	221,897	184,496
Detroit River Tunnel.....	2-72	21,000,000	—	—
Dominion Atlantic.....	273-58	8,431,500	2,189,147	1,983,874
Eastern British Columbia.....	14-00	420,000	58,946	72,013
Edmonton, Dunvegan and British Columbia.....	406-80	9,670,000	1,108,642	1,809,160
Essex Terminal.....	21-00	720,000	269,166	264,876
Esquimalt and Nanaimo.....	199-20	7,332,000	1,508,482	1,132,162
Fredericton and Grand Lake.....	35-00	605,000	145,673	106,452
Grand Trunk Pacific (including branch lines).....	2,744-20	277,438,644	14,403,550	24,543,064
Grand Trunk.....	3,562-87	472,193,464	81,170,179	75,594,816
Hereford.....	53-06	1,600,000	105,856	256,795
International Bridge Coy.....	1-02	2,012,260	—	—
Inverness Railway and Coal Co. (C.N.R.).....	60-91	—	—	—
Kent Northern.....	28-00	63,000	43,538	40,735
Kettle Valley.....	371-08	13,905,000	1,166,315	1,318,370
Lake Erie and Detroit River.....	—	4,400,000	—	—
Lake Huron and Northern Ontario.....	15-00	1,190,000	10,874	10,313
Lotbinière and Mégantic.....	—	50,000	—	—
Maine Central.....	5-10	—	30,359	31,383
Midland Railway of Manitoba.....	6-40	4,800,000	626,430	586,006
Maritime Coal and Ry. Co.....	16-40	3,623,600	159,798	104,218
Massawippi Valley.....	35-46	800,000	303,635	434,781
Montreal and Atlantic.....	184-40	5,243,000	2,241,047	2,179,807
Morrissey, Fernie and Michel.....	10-85	1,263,000	118,531	114,181
Manitoba Great Northern.....	91-77	2,066,000	72,581	182,142
Napierville Junction.....	28-46	600,000	648,677	440,165
Nelson and Fort Sheppard.....	55-42	2,846,800	103,383	236,830
New Brunswick Coal and Ry. Co.....	58-00	1	65,693	108,547
New Westminster Southern.....	4-68	600,000	5,227	2,573
North Shore, N.B. <sup>2</sup> .....	8-63	133,000	—	—
Northern New Brunswick and Seaboard.....	16-90	595,500	—	—
Ottawa and New York.....	56-90	2,100,000	396,637	516,194
Père Marquette in Canada.....	199-04	5,870,000	5,114,476	3,508,661
Pacific Great Eastern.....	290-50	64,519,488	522,282	878,048
Phillipsburg Ry. and Quarry Co. <sup>3</sup> .....	6-00	164,500	—	—
Quebec Central.....	277-00	9,615,009	3,542,000	2,749,620
Quebec Oriental.....	100-00	2,214,574	462,390	424,575
Quebec Ry., Light and Power Co.....	30-97	—	176,695	175,924
Quebec, Montreal and Southern.....	192-18	7,000,000	787,977	882,884
Roberval and Saguenay.....	37-00	3,330,000	417,128	364,421
Red Mountain.....	9-47	412,600	11,337	49,584
Rutland and Noyan.....	3-39	200,000	9,745	23,699
St. Clair Tunnel.....	2-24	3,200,000	—	—
St. Lawrence and Adirondack.....	46-14	2,155,567	1,506,307	1,003,331
Sydney and Louisburg (Dom. Coal Co.).....	77-01	5	1,529,108	1,450,391
Temiscouata.....	122-18	4,099,669	433,038	366,833
Timiskaming and Northern Ontario <sup>4</sup> .....	328-50	—	4,497,412	3,837,068
Thousand Islands.....	6-33	110,000	68,293	53,627
Toronto, Hamilton and Buffalo.....	99-95	10,167,500	3,229,726	2,375,918
Van Buren Bridge Co.....	—	500,000	—	—
Vancouver, Victoria and Eastern.....	230-75	23,500,000	1,052,855	1,503,802
Wabash Ry. Co. in Canada.....	—	—	5,135,998	4,550,823
<b>Total.....</b>	<b>39,383-59</b>	<b>2,170,030,128</b>	<b>492,101,104</b>	<b>478,248,154</b>

<sup>1</sup>Owned and operated by New Brunswick Government. <sup>2</sup>Not operating. <sup>3</sup>Did not report. <sup>4</sup>Constructed and operated by Ontario Government Commission. <sup>5</sup>General capital of Dominion Coal Co.

5.—Steam Railway Statistics, Years ended June 30, 1901-1919, and for Calendar Years 1919 and 1920.

Year.	Miles in operation.	Total Train miles.	Passengers.	Freight.	Gross Earnings.	Operating Expenses.	Ratio of expenses to receipts.
	No.	No.	No.	Tons.	\$	\$	p.c.
1901.....	18,140	53,349,394	18,385,722	36,999,371	72,898,749	50,368,726	69.06
1902.....	18,714	55,729,856	20,679,974	42,376,527	83,666,503	57,343,592	68.54
1903.....	18,988	60,382,920	22,148,742	47,373,417	96,064,527	67,481,524	70.25
1904.....	19,431	61,312,002	23,640,765	48,097,519	100,219,436	74,563,162	74.40
1905.....	20,487	65,934,114	25,288,723	50,893,957	106,467,198	79,977,573	75.12
1906.....	21,353	72,723,482	27,989,782	57,966,713	125,322,865	87,129,434	69.52
1907.....	22,452	75,115,765	32,137,319	63,866,135	146,738,214	103,748,672	70.70
1908.....	22,966	78,637,526	34,044,992	63,071,167	146,918,314	107,304,143	73.04
1909.....	24,104	79,662,216	32,683,309	66,842,258	145,056,336	104,600,084	72.11
1910.....	24,731	85,409,241	35,894,575	74,482,866	173,956,217	120,405,440	69.22
1911.....	25,400	89,716,533	37,097,718	79,884,282	188,733,494	131,034,785	69.43
1912.....	26,727	100,930,271	41,124,181	89,444,331	219,403,753	150,726,540	68.70
1913.....	29,304	113,437,208	46,185,968	106,992,710	256,702,703	182,011,690	70.90
1914.....	30,795	107,895,272	46,702,280	101,393,989	243,083,539	178,975,259	73.63
1915.....	35,582	93,218,479	46,322,035	87,204,838	199,843,072	147,731,099	73.92
1916.....	37,434	111,075,890	43,503,459 <sup>1</sup>	109,659,088	261,888,654	180,542,259	68.94
1917.....	38,604	115,797,100	48,106,530 <sup>1</sup>	121,916,272	310,771,479	222,890,637	71.72
1918.....	38,879	109,857,560	44,948,638 <sup>1</sup>	127,543,687	330,220,150	273,955,436	82.96
1919.....	38,896	103,832,835	43,754,194	116,699,572	382,976,901	341,866,509	89.27
1919 (Dec. 31).....	39,058	107,033,735	47,940,456	111,487,780	408,598,361	376,783,093	92.22
1920 ( " ).....	39,384	117,384,819	51,318,422	127,429,154	492,101,104	478,248,154	97.18

NOTE.—For the years 1875 to 1900, see Canada Year Book, 1916-17, page 434.

<sup>1</sup> Revised figures.

6.—Earnings and Operating Expenses of Steam Railways per mile of line and per train mile, for the years ended June 30, 1909-1919, and for calendar years 1919-1920.

Year.	Gross Earnings.	Operating Expenses.	Net Earnings.	Gross Earnings.	Operating Expenses.
	Per mile of line.			Per train mile.	
	\$	\$	\$	\$	\$
1909.....	6,017.89	4,339.53	1,678.36	1.816	1.309
1910.....	7,033.93	4,868.60	2,165.33	2.036	1.409
1911.....	7,430.45	5,158.85	2,271.60	2.103	1.460
1912.....	8,209.07	5,639.48	2,569.59	2.173	1.493
1913.....	8,760.50	6,211.38	2,549.12	2.263	1.604
1914.....	7,893.60	5,811.83	2,081.77	2.253	1.659
1915.....	5,616.41	4,151.57	1,464.84	2.144	1.585
1916.....	6,943.00	4,823.00	2,120.00	2.358	1.623
1917.....	8,051.00	5,774.00	2,277.00	2.683	1.925
1918.....	8,493.54	7,046.00	1,447.54	3.006	2.494
1919.....	9,846.18	8,789.00	1,057.18	3.683	3.292
1919 (Dec. 31).....	10,461.32	9,645.00	816.32	3.817	3.520
1920 ( " ).....	12,495.00	12,143.00	352.00	4.192	4.074



**7.—Distribution of Operating Expenses of Steam Railways for years ended June 30, 1918 and 1919, and for calendar years 1919 and 1920.**

Items of Expenditure.	June 30.				December 31.			
	1918.		1919.		1919.		1920.	
	\$	p.c.	\$	p.c.	\$	p.c.	\$	p.c.
Ways and structures.....	51,614,858	18.84	69,034,242	20.19	82,343,530	21.85	100,186,413	20.95
Equipment.....	57,304,235	20.92	78,397,270	22.93	85,577,378	22.71	115,613,430	24.17
Traffic expenses.....	6,342,394	2.32	6,545,933	1.91	7,242,438	1.92	9,648,506	2.02
Transportation.....	146,660,355	53.52	172,550,923	50.47	184,214,447	48.90	233,473,462	48.82
General expenses.....	12,033,594	4.40	15,338,141	4.50	17,411,300	4.62	19,326,343	4.04
<b>Total.....</b>	<b>273,955,436</b>	<b>100.00</b>	<b>341,866,509</b>	<b>100.00</b>	<b>376,789,093</b>	<b>100.00</b>	<b>478,248,154</b>	<b>100.00</b>

**8.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, 1910-1920.**

PASSENGERS.

Year ended June 30.	Number of Passengers carried.	Number of Passengers carried one mile.	Number of Passengers carried one mile per mile of line.	Average Receipts per passenger per mile.
	No.	No.	No.	cents
1910.....	35,894,575	2,466,729,664	99,742	1.866
1911.....	37,097,718	2,605,968,924	102,597	1.944
1912.....	41,124,181	2,910,251,636	108,888	1.943
1913.....	46,185,968	3,265,656,080	111,353	1.973
1914.....	46,702,280	3,089,031,194	100,309	2.007
1915.....	46,322,035	2,483,708,745	69,802	2.021
1916.....	43,503,459	2,727,122,648	72,611	1.954
1917.....	48,106,530	3,150,127,428	79,829	1.946
1918.....	44,948,635	3,161,082,402	81,306	2.122
1919.....	43,754,194	3,074,664,369	79,048	2.557
1919 (Dec. 31).....	47,940,456	3,658,492,716	93,668	2.631
1920 ( " ).....	51,318,422	3,522,494,856	89,440	2.916

Year ended June 30.	Average Receipts per passenger.	Average passenger journey in miles.	Average passengers per train.	Passenger revenue per passenger train mile.
	\$	Miles.	No.	\$
1910.....	1.282	69	59	1.313
1911.....	1.360	70	60	1.348
1912.....	1.375	71	62	1.390
1913.....	1.394	71	62	1.223
1914.....	1.328	66	59	1.185
1915.....	1.083	54	50	1.016
1916.....	1.083	55	53	1.042
1917.....	1.140	59	59	1.160
1918.....	1.492	70	64	1.709
1919.....	1.796	70	63	2.012
1919 (Dec. 31).....	2.008	76	70	2.259
1920 ( " ).....	2.002	68	64	2.360

FREIGHT.

Year ended June 30.	Tons of Freight carried.	Tons of Freight carried one mile.	Tons carried one mile per mile of line.	Freight receipts per ton per mile.
	Tons.	Tons.	Tons.	cents
1910.....	74,482,866	15,712,127,701	635,321	0.739
1911.....	79,884,282	16,048,478,295	631,829	0.777
1912.....	89,444,331	19,558,190,527	731,776	0.757
1913.....	106,992,710	23,032,951,596	785,820	0.758
1914.....	101,393,989	22,063,294,685	716,359	0.742
1915.....	87,204,833	17,661,309,723	496,355	0.751
1916.....	199,659,088	28,195,364,264	753,202	0.653
1917.....	121,916,272	31,186,707,851	807,948	0.690
1918.....	127,543,687	31,029,072,279	798,093	0.736
1919.....	116,699,572	27,724,397,202	712,783	0.962
1919 (Dec. 31).....	111,487,780	26,950,598,322	690,015	1.003
1920 ( " ).....	127,429,154	31,894,411,479	809,832	1.071

### 8.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts 1910-1920—concluded.

Freight—concluded.

Year ended June 30.	Receipts per ton hauled.	Average length of freight haul in miles.	Average train load in tons.	Average number freight tons per loaded car.	Revenue per freight train mile.
	\$	Miles.	Tons.	Tons.	\$
1910.....	1-560	-	311	17-13	2-316
1911.....	1-561	-	305	16-91	2-376
1912.....	1-655	-	325	17-87	2-494
1913.....	1-686	216	342	19-01	2-595
1914.....	1-614	217	353	19-18	2-619
1915.....	1-520	202	344	18-43	2-279
1916.....	1-679	257	411	20-91	2-686
1917.....	1-766	256	436	22-24	3-006
1918.....	1-789	243	457	23-10	3-359
1919.....	2-286	238	442	23-46	4-256
1919 (Dec. 31).....	2-427	242	434	22-21	4-358
1920 ( " ).....	2-629	250	457	23-05	4-892

### 9.—Number of Steam Railway Employees, Amount of Salaries and Wages, and Ratios of the latter to Gross Earnings and Operating Expenses for years ended June 30, 1907-1919, and for calendar years 1919-1920.

Year ended June 30.	Employees.	Salaries and wages.	Ratio to gross earnings.	Ratio to operating expenses.
	No.	\$	p.c.	p.c.
1907.....	124,012	58,719,493	40-01	56-60
1908.....	106,404	60,376,607	41-09	56-26
1909.....	125,105	63,216,662	43-58	60-43
1910.....	123,768	67,167,793	38-61	55-78
1911.....	141,224	74,613,738	39-53	56-94
1912.....	155,901	94,237,623	39-79	57-92
1913.....	178,652	115,749,825	45-09	63-59
1914.....	159,142	111,762,972	45-97	62-43
1915.....	124,142	90,215,727	45-15	61-09
1916.....	144,770	104,300,647	39-82	57-95
1917.....	146,175	129,626,187	41-85	58-34
1918.....	143,493	152,274,953	46-14	55-5
1919.....	158,777	208,939,995	54-56	61-19
1919 (Dec. 31).....	173,728	233,323,074	57-10	61-92
1920 ( " ).....	185,177	290,510,518	59-04	60-72

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### 10.—Mileage and Rolling Stock of Steam Railways for years ended June 30, 1916-1919 and for calendar years 1919-1920.

Mileage and Equipment.	Year ended June 30.				Year ended December 31.	
	1916.	1917.	1918.	1919.	1919.	1920.
<b>Mileage and Engines.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>
Miles in operation.....	37,434	38,604	38,879	38,896	39,058	39,384
Miles of sidings.....	8,456	9,224	9,294	9,392	9,685	9,892
Miles of steel rails in main line.....	37,434	38,604	38,879	38,896	39,058	39,384
Miles of steel rails in double track.....	2,489	2,481	2,523	2,543	2,547	2,590
Engines in use.....	5,490	5,626	5,756	5,879	5,947	6,030
<b>Passenger Cars.</b>						
First class.....	2,187	2,168	2,172	2,172	2,209	2,212
Second class.....	706	687	595	618	592	582
Combination.....	409	418	406	396	382	362
Emigrant.....	519	534	568	701	671	673
Dining.....	215	216	196	203	204	196
Parlour.....	138	155	166	164	162	187
Sleeping.....	556	562	555	550	548	584
Baggage, express and postal.....	1,458	1,462	1,514	1,513	1,584	1,479
Other.....	138	175	204	195	186	282

**10.—Mileage and Rolling Stock of Steam Railways for years ended June 30, 1916-1919, and for calendar years 1919-1920—concluded.**

Mileage and Equipment.	Year ended June 30.				Year ended December 31.	
	1916.	1917.	1918.	1919.	1919.	1920.
Freight Cars.	No.	No.	No.	No.	No.	No.
Box.....	144,696	145,290	150,074	153,520	154,044	155,964
Flat.....	25,542	25,322	23,414	24,768	25,657	24,939
Stock.....	7,775	7,883	8,556	9,189	11,023	11,164
Coal.....	15,598	15,649	16,949	18,375	17,908	20,249
Tank.....	416	731	485	419	414	414
Refrigerator.....	4,740	5,234	5,893	6,022	5,591	6,204
Other.....	2,847	3,390	3,664	4,965	5,158	5,555

**11.—Commodities hauled as Freight on Steam Railways for years ended June 30 1917-1919, and the calendar year 1919.**

Products.	June 30.			December 31.
	1917.	1918.	1919.	1919.
	Tons.	Tons.	Tons.	Tons.
<b>Products of Agriculture—</b>				
Grain.....	16,491,090	13,985,361	11,285,463	11,432,613
Flour.....	3,374,965	3,919,476	3,051,415	3,659,096
Other mill products.....	1,684,176	1,722,985	1,534,421	1,717,858
Hay.....	1,042,395	1,522,626	1,650,194	1,527,945
Tobacco.....	44,482	51,252	56,508	52,245
Cotton.....	154,256	349,385	170,657	190,985
Fruit and vegetables.....	1,649,779	1,604,126	1,769,150	2,027,459
Other products of agriculture.....	686,311	722,459	617,655	725,430
<b>Products of animals—</b>				
Live stock.....	1,554,560	1,515,471	1,752,176	1,924,932
Dressed meats.....	645,094	764,121	1,073,921	1,102,869
Other packing house products.....	596,349	644,023	946,949	758,629
Poultry, game and fish.....	373,514	424,728	550,115	406,399
Wool.....	62,456	90,455	73,557	79,755
Hides and leather.....	249,794	250,713	281,055	341,920
Other products of animals.....	499,120	559,821	596,443	664,972
<b>Products of mines—</b>				
Anthracite coal.....	7,623,874	9,033,037	7,361,435	8,944,464
Bituminous coal.....	21,782,484	25,076,008	23,440,474	17,565,702
Coke.....	1,641,448	1,735,596	1,354,697	908,988
Ores.....	5,570,215	5,491,452	4,084,964	2,875,038
Stone, sand, etc.....	3,910,562	3,850,855	3,402,681	4,187,380
Other products of mines.....	2,006,054	2,002,543	1,765,570	1,989,782
<b>Products of forests—</b>				
Lumber.....	10,100,749	10,478,969	9,955,898	10,901,996
Other products of forests.....	8,989,933	10,372,485	11,298,507	9,676,718
<b>Manufactures—</b>				
Petroleum and other oils.....	1,414,800	1,636,594	2,035,899	1,251,735
Sugar.....	797,763	912,113	899,984	1,126,166
Naval stores.....	108,958	133,168	66,129	12,715
Iron, pig and bloom.....	1,723,249	1,745,383	1,460,466	1,141,055
Iron and steel rails.....	1,100,245	1,104,996	1,475,576	1,017,251
Castings and machinery.....	1,920,301	1,997,184	1,638,116	1,234,033
Bar and sheet metal.....	1,562,313	1,784,228	1,544,779	1,183,619
Cement, brick and lime.....	2,698,166	2,192,898	1,883,550	2,532,952
Agricultural implements.....	469,142	529,677	469,230	1,167,659
Wagons, carriages, tools, etc.....	672,939	566,720	567,194	194,295
Wines, liquors and beers.....	218,977	223,350	193,091	466,601
Household goods and furniture.....	438,483	499,751	443,875	10,681,644
Other manufactures.....	8,795,971	9,036,745	8,164,138	4,870,882
Merchandise.....	6,070,858	5,047,616	4,421,320	910,062
Miscellaneous.....	3,151,203	3,952,872	3,362,320	33,936

**11.—Commodities hauled as Freight on Steam Railways for years ended June 30, 1917-1919 and the calendar year 1919—concluded.**

## SUMMARY.

Products.	June 30.			December 31.
	1917.	1918.	1919.	1919.
	Tons.	Tons.	Tons.	Tons.
Products of agriculture.....	25,127,454	23,877,670	20,135,463	21,333,631
Products of animals.....	3,980,887	4,249,332	5,274,216	5,279,476
Products of mines.....	42,534,637	47,189,491	41,409,821	36,471,354
Products of forests.....	19,090,782	20,851,454	21,254,405	20,578,714
Manufactures.....	21,921,307	22,362,807	20,842,027	26,880,607
Merchandise.....	6,070,858	5,047,616	4,421,320	910,062
Miscellaneous.....	3,151,203	3,952,372	3,362,320	33,936
<b>Totals.....</b>	<b>121,916,372<sup>1</sup></b>	<b>127,543,687<sup>1</sup></b>	<b>116,699,572</b>	<b>111,487,780</b>

<sup>1</sup>Includes as not distributed, 39,244 tons in 1917 and 12,945 tons in 1918.

**12.—Commodities hauled as Freight on Steam Railways during the calendar year 1920.**

## (NEW CLASSIFICATION.)

	Tons.		Tons.
<b>Agricultural Products—</b>		<b>Mine Products—concluded.</b>	
Wheat.....	7,323,428	Asphaltum.....	248,672
Corn.....	736,889	Salt.....	307,135
Oats.....	2,181,561	Other mine products.....	782,245
Barley.....	415,498	<b>Total.....</b>	<b>45,075,968</b>
Rye.....	430,189	<b>Forest Products—</b>	
Flax.....	127,975	Logs, posts, poles, cordwood.....	2,517,580
Other grain.....	3,207,893	Ties.....	405,211
Flour.....	2,853,387	Pulp wood.....	3,932,206
Other mill products.....	1,563,196	Lumber, timber, box shooks, staves, heading.....	10,572,971
Hay and straw.....	1,664,054	Other forest products.....	4,850,912
Cotton.....	237,914	<b>Total.....</b>	<b>22,278,880</b>
Apples (fresh).....	324,405	<b>Manufactures and Miscellaneous—</b>	
Other fruit (fresh).....	376,615	Refined petroleum and its products.....	1,263,856
Potatoes.....	788,217	Sugar.....	1,166,039
Other fresh vegetables.....	212,961	Iron—pig and bloom.....	1,352,921
Other agricultural products.....	860,797	Rails and fastenings.....	751,077
<b>Total.....</b>	<b>23,304,979</b>	Bar and sheet iron—structural iron pipe.....	2,231,908
<b>Animal Products—</b>		Castings, machinery and boilers..	1,325,906
Horses.....	120,911	Cement.....	1,176,451
Cattle and calves.....	1,061,143	Brick and artificial stone.....	1,912,172
Sheep.....	70,125	Lime and plaster.....	276,039
Hogs.....	243,311	Sewer pipe and drain tile.....	77,112
Dressed meats (fresh).....	695,743	<b>Agricultural implements and ve- hicles other than auto's.....</b>	<b>756,424</b>
Dressed meats (cured or salted).....	120,083	Automobiles and auto trucks.....	563,301
Other packing house products.....	459,734	Household goods.....	197,727
Poultry.....	78,828	Furniture.....	197,336
Eggs.....	90,461	Liquor and beverages.....	279,063
Butter and cheese.....	196,957	Fertilizers, all kinds.....	222,552
Wool.....	101,533	Paper, printed matter, books.....	1,624,809
Hides and leather.....	260,301	Wood pulp.....	1,877,805
Other animal products.....	272,000	Fish (fresh, frozen, cured, etc.)....	182,943
<b>Total.....</b>	<b>3,801,130</b>	Canned meats.....	10,992
<b>Mineral Products—</b>		Canned goods (all canned food products other than meat).....	305,662
Anthracite coal.....	9,513,891	Other manufactures and miscel- laneous.....	10,061,340
Bituminous coal.....	22,933,445	Merchandise.....	5,111,959
Lignite coal.....	240,249	<b>Total.....</b>	<b>32,925,394</b>
Coke.....	1,109,449	<b>Grand Total.....</b>	<b>127,429,154<sup>1</sup></b>
Iron ore.....	899,546		
Other ores and concentrates.....	2,127,184		
Base bullion and matte.....	173,851		
Clay, gravel, sand, stone (crushed).....	4,473,155		
Slate—dimension or block stone..	1,216,140		
Crude petroleum.....	1,051,006		

<sup>1</sup> Includes 42,803 tons not classified.



### 13.—Areas of Land Subsidies granted to Steam Railways by the Dominion and Provincial Governments up to December 31, 1920.

By the Dominion Government to:	Acres.
Alberta Railway and Irrigation Co.....	1,101,712
Alberta Great Waterways Railway Co.....	1,007
Canadian Pacific, main line.....	18,198,172
Calgary and Edmonton Railway Co.....	1,817,700
Great North West Central Railway Co.....	320,000
Manitoba North Western Railway Co.....	1,500,992
Manitoba South Western Colonization Railway Co.....	1,396,263
Saskatchewan and Western Railway Co.....	98,880
C.P.R. Pipestone Extension, Souris Branch.....	200,094
C.P.R. Souris Branch.....	1,406,932
Canadian National—	
Canadian North Western Railway Co.....	745
Canadian Northern Alberta Railway Co.....	1,527
Canadian Northern Manitoba Railway Co.....	73
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.....	1,622,922
Canadian Northern Railway Co.....	3,789,721
Edmonton, Dunvegan and British Columbia Railway Co.....	3,678
Grand Trunk Pacific.....	28,229
Grand Trunk Pacific Branch Lines.....	1,499
<b>Total by Dominion Government.....</b>	<b>31,488,146</b>
By Provincial Governments:	
Quebec.....	13,324,950
British Columbia.....	8,119,221
New Brunswick.....	1,788,392
Nova Scotia.....	160,000
Ontario.....	3,241,207
<b>Total by Provincial Governments.....</b>	<b>26,633,770</b>
<b>Total area of Dominion and Provincial land grants to steam railways.....</b>	<b>58,121,916</b>

### 14.—Analysis of the Total Financial Aid given to Steam Railways up to Dec. 31, 1920.

By the Dominion Government.		By Provincial Governments.	
	\$		\$
Cash subsidies.....	114,625,658	Cash subsidies.....	33,593,898
Loans.....	58,076,533	Loans.....	9,575,473
		Subscriptions to shares.....	300,000
Paid to Quebec Government.....	5,160,053	<b>Total.....</b>	<b>43,469,371</b>
Cost of lines handed over to C.P.R.....	37,785,319	By Municipalities.	
Implement Clause of Grand Trunk Pacific.....	6,263,715	Cash subsidies.....	12,893,528
		Loans.....	1,071,645
		Subscriptions to shares.....	2,425,500
		<b>Total.....</b>	<b>16,390,673</b>
<b>Total.....</b>	<b>221,911,278</b>	<b>Grand Total.....</b>	<b>281,771,322</b>

### 15.—Aid to Railways in the form of Guarantees of Bonds, Interest, etc., by the Dominion and Provincial Governments up to Dec. 31, 1920.

Government.	Authorized.	Guarantees earned.
	\$	\$
Dominion.....	238,880,792	234,484,537
Manitoba.....	25,663,553	25,663,553
Alberta.....	59,495,900	39,633,658
Saskatchewan.....	47,725,000	23,170,661
Ontario.....	7,860,000	7,860,000
British Columbia.....	65,135,000	60,317,524
New Brunswick.....	7,871,396	7,871,396
Quebec.....	182,000	182,000
<b>Total.....</b>	<b>455,813,641</b>	<b>399,183,329</b>

**16.—Cost of Construction, Working Expenses and Revenue of Government Railways, for the fiscal years 1868-1900, 1901-1921, and before Confederation.**

Year.	Cost of construction.	Working Expenses. <sup>2</sup>	Revenue. <sup>2</sup>	Surplus (+) and deficit (—).
	\$	\$	\$	\$
Before Confederation.....	13,881,461	—	—	—
1868-1900.....	114,091,210	81,391,472	73,226,382	-8,165,090
1901.....	3,922,989	5,739,052	5,213,381	-525,671
1902.....	5,386,611	5,861,099	5,918,990	+57,891
1903.....	3,083,681	6,474,134	6,584,599	+110,465
1904.....	2,619,060	7,599,959	6,627,256	-972,703
1905.....	6,125,482	8,906,154	7,050,892	-1,855,262
1906.....	6,102,566	7,893,653	7,950,553	+56,900
1907 (9 mos.).....	7,174,370	6,328,746	6,509,186	+180,440
1908.....	23,684,005	9,595,295	9,534,569	-60,726
1909.....	29,414,227	9,764,587	8,894,420	-870,167
1910.....	21,505,976	9,095,904	9,647,964	+552,060
1911.....	24,532,466	10,037,879	10,249,394	+211,515
1912.....	23,108,806	11,074,853	11,034,166	-40,687
1913.....	17,375,968	12,499,926	12,442,203	-57,723
1914.....	21,628,095	13,559,225	13,394,317	-164,908
1915.....	21,865,664	12,474,454	12,149,357	-325,097
1916.....	21,155,255	19,407,380	18,427,909	-979,471
1917.....	12,003,650	25,795,907	23,539,759	-2,256,148
1918.....	34,699,417	33,400,460	27,240,957	-6,159,503
1919.....	40,193,181	43,889,626	38,013,726	-5,875,900
1920.....	11,593,148	48,194,710	41,402,061	-6,792,649
1921.....	5,096,535	43,770,971	36,814,350	-6,956,621
<b>Total.....</b>	<b>470,243,722<sup>1</sup></b>	<b>432,755,446</b>	<b>391,866,392</b>	<b>-40,889,054</b>

<sup>1</sup>Less \$40,000 received from St. John City for the Carleton Branch railway = \$470,203,722. Cost of Quebec Bridge not included. <sup>2</sup>Includes Windsor Branch.

Note.—For the years 1868 to 1900, see Canada Year Book, 1916-17, page 437.

**17.—Capital Expenditure by Dominion Government for construction of Government Steam Railways to March 31, 1921.**

Railways.	\$
Intercolonial.....	132,922,112
Now forming parts of the Intercolonial:	
Cape Breton.....	3,964,433
Oxford and New Glasgow.....	1,949,063
Eastern Extension.....	1,324,043
Drummond County.....	1,464,000
Montreal and European Short Line.....	333,943
Canada Eastern.....	819,000
Canadian Government Railways Rolling Stock.....	39,589,062
Prince Edward Island.....	12,806,036
National Transcontinental.....	167,812,568
Canadian Pacific.....	62,789,776
Annapolis and Digby.....	660,683
Yukon Territory Works (Stikine-Teslin Ry.).....	283,324
Carleton Branch.....	48,410
Hudson Bay Railway.....	20,439,773
International Railway of New Brunswick.....	2,896,354
New Brunswick and Prince Edward Island Railway.....	618,315
Quebec and Saguenay Ry.....	7,708,325
Governor-General's Cars.....	71,539
European and North American Ry.....	88,363
Nova Scotia Ry.....	208,510
Elgin and Havelock Ry.....	118,204
Moncton and Buctouche Ry.....	149,616
Salisbury and Albert Ry.....	299,779
St. Martins Ry.....	239,783
York and Carleton Ry.....	22,048
Canadian Northern Ry.....	10,000,000
Caraquet and Gulf Shore Ry.....	229,600
Lotbinière and Megantic Ry.....	346,715
Miscellaneous Expenditure.....	18,345
Quebec Bridge.....	14,831,743
<b>Grand Total.....</b>	<b>485,053,465</b>

**18.—Number of Passengers, Employees and others killed and injured on Steam Railways for the years ended June 30, 1888-1919, and for calendar years 1919-1920.**

Year.	Passengers.		Employees.		Others.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1888-1900.....	176	966	1,104	8,459	1,661	1,785	2,941	11,210
1901.....	16	135	118	970	183	212	317	1,317
1902.....	14	176	152	932	164	220	330	1,328
1903.....	53	258	186	945	181	250	420	1,453
1904.....	25	234	192	912	178	259	395	1,407
1905.....	35	244	208	919	225	194	468	1,355
1906.....	16	233	139	890	206	242	361	1,365
1907.....	70	355	259	1,569	269	228	598	2,152
1908.....	28	345	224	1,793	184	222	436	2,360
1909.....	36	281	209	1,679	260	226	505	2,186
1910.....	62	279	295	1,605	258	255	615	2,139
1911.....	28	297	227	2,715	236	317	493	3,329
1912.....	45	493	234	2,024	288	363	568	3,780
1913.....	41	667	324	3,407	377	498	742	4,572
1914.....	27	415	224	3,161	349	463	600	4,039
1915.....	17	336	115	2,573	247	362	379	3,271
1916.....	20	309	174	4,332	274	337	468	4,978
1917.....	24	438	209	4,596	219	401	452	5,435
1918.....	32	344	178	5,352	200	393	410	6,089
1919.....	36	307	174	5,432	176	412	386	6,151
<b>Total, to June 30, 1919.....</b>	<b>891</b>	<b>7,112</b>	<b>4,945</b>	<b>55,165</b>	<b>6,135</b>	<b>7,639</b>	<b>11,884</b>	<b>69,916</b>
1919.....	34	392	197	6,349	209	476	440	7,217
1920.....	29	481	167	7,719	197	480	393	8,680

NOTE.—For the years 1888 to 1900, see Canada Year Book, 1916-17, page 443.

**19.—Number of Persons Killed and Injured on Steam Railways, year ended June 30, 1919, and for the calendar years 1919 and 1920.**

(A) IN ACCIDENTS RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

Descriptions of Persons.	June 30.		December 31.			
	1919.		1919.		1920.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Passengers.....	34	296	33	372	28	456
Employees.....	151	1,860	162	1,904	145	2,513
Trespassers.....	112	133	129	132	106	170
Non-trespassers.....	60	177	68	239	78	237
Postal clerks, expressmen, etc.....	2	80	7	65	3	26
<b>Total.....</b>	<b>359</b>	<b>2,546</b>	<b>399</b>	<b>2,712</b>	<b>360</b>	<b>3,402</b>
Description of Accident <sup>1</sup> —						
Coupling and uncoupling.....	11	172	11	176	12	242
Collisions.....	18	159	35	194	29	223
Deraillments.....	19	275	29	261	23	313
Parting of trains.....	—	35	1	26	—	43
Locomotives or cars breaking down....	3	47	4	60	—	74
Falling from trains or cars.....	30	306	29	346	22	419
Jumping on or off.....	22	317	9	303	8	308
Struck by trains, etc.....	206	385	61	125	70	165
Overhead obstruction.....	5	31	2	41	—	31
Other causes.....	45	819	14	744	9	1,151
<b>Total.....</b>	<b>359</b>	<b>2,546</b>	<b>195</b>	<b>2,276</b>	<b>173</b>	<b>2,969</b>

<sup>1</sup>Passengers and Employees only Dec. 1919 and 1920.

**19.—Number of Persons Killed and Injured on Steam Railways, year ended June 30, 1919, and for the calendar years 1919 and 1920—concluded.**

(B) IN ACCIDENTS OTHER THAN THOSE RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

Description of Persons.	June 30.		December 31.			
	1919.		1919.		1920.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Stationmen.....	3	428	2	671	—	710
Shopmen.....	8	1,449	6	1,733	5	1,950
Trainmen and Trackmen.....	6	970	10	1,234	6	1,355
Other employees.....	6	725	17	807	11	1,191
Passengers.....	2	11	1	20	1	25
Others.....	2	22	5	40	10	47
<b>Total.....</b>	<b>27</b>	<b>3,605</b>	<b>41</b>	<b>4,505</b>	<b>33</b>	<b>5,278</b>

### ELECTRIC RAILWAYS.

The cheap and reasonably rapid conveyance of human beings is a necessity of the modern urban life which falls to the lot of an annually increasing percentage of the population of Canada. This necessity of life is supplied throughout Canada by the electric street railway, generally operated by the development of the water powers which are so important a feature of Canadian economic life.

**Historical.**—Replacing the horse-car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated at the Toronto Exhibition Grounds. Before many years, their safety and convenience resulted in the discarding of the older system. An electric system, 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. This was followed by the completion of the Ottawa Electric railway in 1891, and the electrification of the Montreal and Toronto systems in 1892. The street railways of other Eastern cities were generally electrified during the nineties, while in the newer western cities electricity was used from the commencement. In the cities of the East, electric street railways are generally operated by private companies under franchises from the city, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the city, a fact which is indicated for 1920 in Table 23 by the word "municipal" in the name of the railway. In 1921, on the expiry of the 30 year franchise of the Toronto Street railway, the line in this second largest city of Canada was taken over by the city and is now being operated by a transportation commission.

Where possible, water-power with turbine engines is used for generating purposes. Where this is not available, steam power is necessary and although a more expensive method, modern devices have greatly reduced the cost per h.p. Many difficulties are met in operating the cars during the winter season, due to snow, ice and sleet. These, however, have been overcome by the use of sweepers, scrapers and plows. The single overhead trolley system has been found the most suitable and is in general use.

Great advances have been made during recent years in the construction and use of suburban or inter-urban lines, their mileage



now comprising a large percentage of the total. The greatest part of this track is in the Toronto, Niagara and Lake Erie district, on which considerable freight traffic is carried, and on the Pacific coast, where the British Columbia electric railway operated 421 freight cars in 1920.

**Development of Electric Railway Traffic.**—Figures for the year 1893 show that 30 companies with a paid-up capital of about \$9,000,000 operated 256 miles of railway. By 1897, 35 companies made returns showing 583 miles of track, 1,156 cars, 26,431,017 miles run, 83,811,306 passengers carried and capital of \$18,727,355. In 1904, 46 companies showed 766 miles of track, 2,384 cars, 42,066,124 miles run, 181,689,998 passengers, and capital of \$30,314,730. Steady increases up to 1920 show that during that year 66 companies actually in operation, with 2,427 miles computed as single track, 5,240 cars, 114,481,406 miles run and 804,711,333 fare passengers carried, had a capital of \$170,826,404. The number of employees in the service of electric railways on Dec. 31, 1920, was 17,341 as compared with 16,940 in 1919. Total salaries and wages for the year 1920 were \$24,235,932, as against \$20,211,576 in 1919.

**Statistics of Electric Railways.**—Summary statistics of the operation of electric railways in Canada from 1901 to 1920 inclusive are given by years in Table 20. In Table 21 statistics of the mileage and equipment are given for the last three railway years, and annual statistics of the capital liability of electric railways are furnished from 1908 in Table 22. Detailed figures for railways of the miles operated, the capital liability, the earnings and operating expenses are given for 1920 in Table 23, while Table 24 gives by years from 1894 to 1920 the number of passengers, employees and others killed and injured on electric railways in Canada.

20.—Summary Statistics of Electric Railway Operation, years ended June 30, 1901-1919, and for calendar years 1919-1920.

Year.	Miles in Opera- tion.	Total Car Mileage.	Passengers.	Freight.	Gross Earnings.	Working Expenses.	Ratio of expen- ses to receipts.
	Miles.	Miles.	No.	Tons.	\$	\$	p.c.
1901.....	674-58	31,750,754	120,934,656	287,926	5,768,283	3,435,162	59-55
1902.....	557-59	35,833,841	135,681,402	266,182	6,486,438	3,802,855	58-63
1903.....	759-36	38,028,529	155,662,812	371,286	7,233,677	4,472,858	61-83
1904.....	766-50	42,066,124	181,689,998	400,161	8,453,609	5,326,516	63-01
1905.....	793-12	45,959,101	203,467,217	510,350	9,357,125	5,918,194	63-25
1906.....	813-74	50,618,836	237,655,074	506,024	10,966,871	6,675,037	60-87
1907.....	814-52	53,361,227	273,999,404	479,731	12,630,430	7,373,251	58-38
1908.....	992-03	56,964,881	299,099,309	732,475	14,007,049	8,695,880	62-08
1909.....	988-97	60,152,846	314,026,671	—	14,611,484	8,885,235	60-81
1910.....	1,047-07	65,249,166	360,964,876	852,294	17,100,789	10,121,781	59-19
1911.....	1,223-73	72,618,806	426,296,792	1,228,362	20,356,952	12,096,134	59-42
1912.....	1,308-17	82,070,064	488,865,682	1,435,525	23,499,250	14,266,675	60-71
1913.....	1,356-63	89,005,216	597,863,801	1,957,930	28,216,111	17,765,372	62-96
1914.....	1,560-82	98,917,808	614,709,819	1,845,923	29,691,007	19,107,818	64-36
1915.....	1,590-29	96,964,829	562,302,373	1,433,602	26,922,900	18,099,906	66-02
1916.....	1,673-77	82,516,612	580,094,167	1,936,674	27,416,285	17,535,975	63-95
1917.....	1,743-54	84,073,046	629,441,997	2,333,539	30,237,664	20,098,634	66-47
1918.....	1,616-36 <sup>1</sup>	84,435,323 <sup>1</sup>	487,365,456 <sup>1</sup>	2,497,530 <sup>1</sup>	24,299,890 <sup>1</sup>	17,535,975 <sup>1</sup>	72-16 <sup>1</sup>
1919.....	1,696-52	106,961,607	686,124,263	2,474,892	35,696,532	26,839,071	75-18
1919 (Dec. 31).....	1,686-78	110,206,344	749,334,380	2,374,612	40,698,586	31,385,702	77-12
1920 ( " ).....	1,698-76	114,481,406	804,711,333	2,691,150	47,047,246	37,242,483	79-16

<sup>1</sup>Not including Montreal Tramways and several other units.

### 21.—Mileage and Equipment of Electric Railways for the year ended June 30, 1919, and for calendar years 1919-1920.

Mileage.	1919.	1919.	1920.	Cars.	1919.	1919.	1920.
	No.	No.	No.		No.	No.	No.
Length of first main track.....	1,696.52	1,686.78	1,698.76	Passenger cars, closed.....	3,077	3,120	3,300
Length of second main track.....	482.36	484.63	509.35	Passenger cars, open.....	538	513	371
Total length of main track.....	2,178.88	2,171.41	2,208.11	Passenger cars, combination.....	725	766	667
Length of sidings and turnouts.....	220.92	228.16	219.14	Freight cars.....	726	718	669
Total, computed as single track.....	2,399.80	2,399.57	2,427.25	Mail, express and baggage cars.....	41	43	44
				Combination, freight.....	16	17	21
				Work cars.....	208	207	168
				Snow ploughs.....	60	62	60
				Sweepers.....	135	142	143
				Miscellaneous.....	144	98	107
				Locomotives.....	49	48	54

### 22.—Capital Liability of Electric Railways, years ended June 30, 1908-1919, and for calendar years 1919-1920.

Year.	Stocks.	Funded Debt.	Total.	Year.	Stocks.	Funded Debt.	Total.
	\$	\$	\$		\$	\$	\$
1908.....	50,295,266	37,114,619	87,409,885	1915.....	66,696,675	83,647,327	150,344,002
1909.....	51,946,433	39,658,556	91,604,989	1916.....	67,738,275	87,157,309	154,895,584
1910.....	58,653,826	43,391,153	102,044,979	1917.....	70,606,520	90,628,219	161,234,739
1911.....	62,251,203	49,281,144	111,532,347	1918.....	73,864,820	93,388,273	167,253,093
1912.....	70,829,118	52,012,828	122,841,946	1919.....	93,042,368	78,852,188	171,894,556
1913.....	62,079,767	79,155,864	141,235,631	1919.....	91,757,418	81,283,922	173,041,340
1914.....	66,311,098	81,284,244	147,595,342	1920.....	91,321,955	79,504,449	170,826,404

NOTE.—The totals here given do not include \$493,346 aid paid by Governments and Municipalities.

### 23.—Mileage, Capital, Earnings and Operating Expenses of Electric Railways, year ended December 31, 1920.

Name of Railway.	Miles operated.	Capital Liability.	Earnings.	Operating expenses.
	No.	\$	\$	\$
Brandon Municipal.....	9.90	450,000	45,219	50,380
Brantford Municipal.....	14.61	521,500	191,734	147,633
Brantford and Hamilton.....	23.19	960,000	287,747	187,767
British Columbia.....	244.84	17,421,485	5,249,688	4,287,406
Calais Street.....	7.00	200,000	55,698	51,759
Calgary Municipal.....	66.50	2,365,173	921,806	709,104
Canadian Resources Development Co.....	1.75	14,843	32	892
Cape Breton Electric Co.....	30.59	2,455,000	345,988	321,876
Chatham, Wallaceburg and Lake Erie.....	37.05	1,455,100	197,167	197,352
Cornwall Street Ry., Light and Power Co.....	4.00	200,000	64,351	45,738
Edmonton Radial.....	32.82	3,054,557	745,623	667,499
Fort William Municipal.....	20.61	1,337,000	184,381	161,068
Fort William Terminal Ry. and Bridge Co.....	—	125,000	—	—
Grand River.....	18.55	551,000	395,065	328,201
Guelph Radial.....	8.70	169,870	77,781	86,566
Hamilton and Dundas Street.....	6.98	200,000	103,038	107,848
Hamilton, Grimsby and Beamsville.....	22.60	385,000	207,387	224,257
Hamilton Radial.....	22.86	271,150	229,371	226,083
Hamilton Street.....	17.40	1,545,884	1,015,884	817,587
Hull Electric Co.....	16.54	292,000	335,217	230,282
International Transit Co.....	4.30	242,500	109,053	73,405
Kingston, Portsmouth and Cataract.....	6.00	183,100	72,741	61,738
Kitchener and Waterloo Street.....	3.28	129,865	96,045	72,017
Lethbridge Municipal.....	2.80	449,949	63,662	65,501
Lake Erie and Northern.....	51.00	3,817,500	360,129	306,422
Levis County.....	11.50	922,900	143,468	148,675
London Street.....	27.48	1,156,480	524,728	454,557
London and Port Stanley.....	24.50	2,906,194	636,652	451,800
Moncton Tramway Co. <sup>2</sup> .....	2.72	1,382,400	17,028	13,703
Montreal Tramways.....	141.08	40,608,996	11,606,099	8,245,055
Montreal and Southern Counties.....	52.67	1,000,000	476,044	506,553

<sup>1</sup>Formerly Kitchener, Waterloo, Wellesley and Lake Huron.

<sup>2</sup>Representing all divisions of the Company.

### 23.—Mileage, Capital, Earnings and Operating Expenses of Electric Railways, year ended December 31, 1920—concluded.

Name of Railway.	Miles operated.	Capital Liability.	Earnings.	Operating expenses.
	No.	\$	\$	\$
Moosejaw.....	9-00	795,372	127,634	104,844
New Brunswick Power Co. <sup>1</sup> .....	14-30	5,100,000	406,951	375,031
Nelson Municipal.....	2-13	81,000	20,518	16,689
Nipissing Central.....	15-37	530,000	118,116	139,716
Niagara Falls, Park and River.....	11-91	600,000	208,223	151,429
Niagara, St. Catharines and Toronto.....	75-20	2,023,000	969,266	884,582
Niagara, Welland and Lake Erie.....	1-87	283,000	30,431	17,556
Nova Scotia Tramways and Power Co. <sup>1</sup> .....	12-60	7,838,800	660,147	636,778
Oshawa.....	9-00	40,000	290,233	177,728
Ottawa.....	24-56	2,246,900	1,786,066	1,257,690
Peterborough Radial.....	7-64	476,200	96,013	96,851
Port Arthur Municipal.....	12-43	817,470	192,694	154,883
Pictou County Electric Co. <sup>1</sup> .....	9-20	1,130,000	113,754	101,520
Quebec Railway, Light and Power Co. (Citadel division).....	19-09		842,999	640,816
Quebec Railway, Light and Power Co. (Montmorency division).....	27-50	5,775,670 <sup>2</sup>	352,865	273,948
Regina Municipal.....	25-59	1,586,288	349,604	298,486
Sandwich, Windsor and Amherstburg.....	35-11	1,086,000	493,818	352,402
Sarnia Street.....	8-25	174,100	99,593	82,808
Saskatoon Municipal.....	12-63	827,036	269,080	260,916
Schomberg and Aurora.....	14-44	550,000	26,950	25,056
Shawinigan Falls Terminal.....	3-75	493,800	90,251	71,466
Sherbrooke Railway and Power Co. <sup>1</sup> .....	9-39	2,827,000	85,501	103,102
St. Thomas Municipal.....	6-25	146,863	24,214	28,202
Suburban Rapid Transit (Winnipeg).....	17-26	600,000	174,973	158,312
Sudbury, Copper Cliff Suburban.....	7-90	282,946	55,299	45,054
Sydney and Glace Bay.....	-	872,000	-	-
Three Rivers Traction Co.....	7-10	805,700	164,993	101,327
Toronto Street.....	62-04	14,274,360	7,909,892	6,626,508
Toronto Suburban.....	65-90	4,128,000	465,508	438,600
Toronto Civic.....	10-26	2,536,737	547,220	586,819
Toronto and York Radial.....	72-32	2,000,000	1,036,443	807,814
Waterloo-Wellington Ry. Co.....	3-45	79,200	13,403	12,423
Windsor, Essex and Lake Shore Rapid.....	36-17	1,750,000	280,402	216,607
Winnipeg, Selkirk and Lake Winnipeg.....	38-48	1,153,200	201,325	154,859
Winnipeg Street <sup>1</sup> .....	63-65	19,212,200	3,697,299	2,545,587
Woodstock, Thames Valley and Ingersoll.....	10-20	340,000	25,842	23,577
Yarmouth Light and Power Co. <sup>1</sup> .....	3-00	590,000	60,900	23,773
<b>Totals.....</b>	<b>1,698-76</b>	<b>170,826,404</b>	<b>47,047,246</b>	<b>37,242,483</b>

<sup>1</sup>Representing all Divisions of the Company.<sup>2</sup>Including capital for lighting, power and gas plants.

### 24.—Number of Passengers, Employees and others Killed and Injured on Electric Railways, years ended June 30, 1894-1919, and for calendar years 1919-1920.

Year.	PASSENGERS.		EMPLOYEES.		OTHERS.		TOTALS.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1894-1899.....	1	23	2	9	9	12	12	44
1900.....	-	6	-	-	2	7	2	13
1901.....	3	158	1	58	11	98	15	314
1902.....	9	410	1	33	22	120	32	563
1903.....	10	504	7	62	22	212	39	778
1904.....	10	508	3	64	40	272	53	844
1905.....	30	862	3	87	23	347	56	1,296
1906.....	11	1,085	2	127	34	441	47	1,653
1907.....	27	988	7	216	37	532	71	1,736
1908.....	18	1,156	6	188	43	539	67	1,883
1909.....	11	1,303	7	218	50	618	68	2,139
1910.....	14	1,595	13	227	68	716	95	2,538
1911.....	11	1,784	8	300	83	586	102	2,670
1912.....	16	1,950	8	442	86	736	110	3,128
1913.....	17	1,662	12	392	44	490	73	2,544
1914.....	9	1,757	13	469	42	581	64	2,807
1915.....	14	1,554	6	413	44	638	64	2,605
1916.....	18	1,905	4	305	28	819	50	3,029
1917.....	11	1,541	10	395	42	792	63	2,728
1918.....	9	1,451	12	383	56	762	77	2,596
1919.....	10	1,600	37	621	47	1,290	94	3,511
<b>Totals to June 30, 1919.....</b>	<b>259</b>	<b>23,802</b>	<b>162</b>	<b>5,009</b>	<b>833</b>	<b>10,608</b>	<b>1,254</b>	<b>39,419</b>
1919.....	4	1,717	29	951	58	1,505	91	4,173
1920.....	9	1,968	7	658	75	1,434	91	4,060

## MOTOR VEHICLES.

The earliest motor vehicles were propelled by steam, the history of the gasoline motor car commencing with the construction of a successful gasoline engine by Daimler in 1884. Until 1900 France remained the headquarters of the industry, possessing in the latter year more than half of the 10,000 cars in operation in Europe, while in the United States the number of cars was only about 700. Shortly afterwards the invention of the Ford car resulted in a keen competition to bring motor cars within the reach of the average man, profits being secured from large production rather than high prices. Detroit became the centre of the automobile industry of the United States and the Canadian side of the Detroit river became the headquarters of the Canadian industry. As a consequence the population of such border towns as Windsor, Walkerville, and Sandwich has greatly increased in the past decade, while Ford City, which had no existence in 1911, had 5,870 inhabitants in 1921.

Like many other inventions, the motor car commenced as a toy, then as the luxury of the rich, while now it ranks as a comfort of those in moderate circumstances and may even become a necessity of life to the masses. Of late years it has been increasingly used for economic purposes and to-day the great majority of cars effect substantial economies in time or in money for their owners, partly or wholly offsetting their cost of upkeep. In the past few years, the motor truck—the freight automobile—has assumed considerable economic importance, and this year it is separately classified in Table 27 of this section.

The increase of the use of motor vehicles in Canada has been very rapid. In 1904 the number of motor vehicles registered in Ontario was only 535. In 1907, 2,130 motor vehicles were registered in six Provinces, and in 1908, 3,033 in eight provinces, the motor car being at that time prohibited in Prince Edward Island. From these small beginnings Table 26 shows an increase to 465,378 motor vehicles in 1921, an increase over 1920 of 58,314, or more than the total number of motor vehicles registered in 1913. In Table 27 are given the numbers registered by provinces in 1921, classified as passenger cars, commercial cars or trucks, and motor cycles.

According to statistics collected for 1920 by the National Automobile Chamber of Commerce of the United States, Canada in that year ranked next to the United States and Great Britain among the countries of the world in the number of its motor vehicles. In 1921 it possessed a motor vehicle for every 19 of its population.

In a recent government report the statement is made that "the automotive transport industry is just beginning to be a factor in the transportation of passengers and freight in this country. Railways have found that the handling of less than car-load lots of freight is often unprofitable business; it follows that commercial trucks are being used in greater numbers to carry lighter shipments of property between some of the larger centres served by adequately surfaced



highways." While the increased passenger and freight rates are probably the main cause of the comparatively slow increase in recent years in railway traffic (see Table 5 of this section), there can be no doubt that motor vehicles are now doing much transportation work formerly performed by steam and electric railways.

#### **Motor Vehicles Acts and Regulations in Force.**

The following is a brief synopsis of the laws and regulations in force in each province, and Table 25 summarizes the legal speed limits by provinces under the varying conditions specified.

**Prince Edward Island.**—Under the Motor Vehicles Act, 1913, with amendments and regulations, all cars must be registered in the office of the Provincial Secretary. In addition to the registration fee, an annual tax is payable on the 1st of May, but this is not required of non-residents unless the car is used in the province during more than four weeks in one year. All drivers of cars, owners included, must be eighteen years old and must be licensed. Every car must have a lock, or other device, to prevent it from being operated when left unattended. The speed limits are, in cities, towns and villages  $7\frac{1}{2}$  miles an hour, in places which are closely built up 10 miles, where there is not a clear view of the road for at least 200 yards 12 miles, and in all other places 15 miles an hour. The number of cars registered in 1921 (up to December 31) not including dealers' registration was 1,751.

**Nova Scotia.**—The Motor Vehicle Act, 1918, requires cars to be registered by the Provincial Secretary, who issues permits renewable annually on January 1. Cars belonging to persons residing out of Nova Scotia need not be registered if cars are registered in the place where owners reside, and are used as passenger cars. This privilege is given for a period of not more than three months in each year. If owners come into the province to reside permanently or to carry on business they must register. No person under 16 may operate a motor vehicle, and paid chauffeurs must be at least 18 and must take out licenses. Cars must have devices which will prevent their operation when left unattended and must also have mufflers. The speed limits are, in cities, towns and villages and in places where there is no clear view of the road for at least 50 yards, 15 miles an hour, at cross-roads and bridges, 15 miles, and in other places 25 miles an hour. During 1921 the number of permits issued for cars was 14,205, including 155 motor cycles.

**New Brunswick.**—Under the Motor Vehicle Law, 1915, as amended May, 1917, the registering and licensing authority is the Department of Public Works. Cars must be re-registered every third year, and besides the registration fee, an annual fee is payable on January 1. Non-residents may operate cars registered in another province or state during not more than 21 days in any year without registration in New Brunswick. The driver of a car must be 18 years old, and must be the owner or a member of his household, a

licensed chauffeur or a person accompanied by a chauffeur; all chauffeurs must take out licenses and must pass a qualifying examination before issue of the license. The speed limits are, in cities, towns and villages 12 miles an hour, in places which are closely built up, 15 miles an hour, and in other places where the road cannot be seen clearly for 200 yards, 20 miles an hour.

**Quebec.**—The law as to motor vehicles is contained in the Revised Statutes, 1909, chapter 4, s. xxi, and amending Acts. Cars must be registered in the office of the Provincial Treasurer and re-registered annually on March 1. Save in the cases of taxi-cabs and auto-busses or similar vehicles which run daily or periodically between the province and neighbouring provinces or states, no registration in the province is required of cars registered outside the province, provided that similar exemption is granted by law of the state or province in which the tourist resides. All drivers of cars must be licensed, and must not be less than 18 years old. Cars, when left unattended, must be locked in such a way as to prevent their use, and all cars must have mufflers. The speed limits are, in cities, towns and villages, 16 miles an hour, on highways where the land is closely built up, 16 miles an hour, at bridges and cross-roads and within a distance of five hundred feet before reaching a railroad crossing, 8 miles an hour, and in open country 25 miles an hour. Motors must stop for street cars which are standing to take on or discharge passengers.

**Ontario.**—The Acts concerning motor vehicles are the Motor Vehicles Act, R.S.O., 1914, c. 207, the Highway Travel Act, R.S.O., 1914, c. 206, the Load of Vehicles Act, 6 Geo. V, c. 49, and the Public Vehicles Act, 10 Geo. V, c. 76, and amending Acts. The registering authority is the Department of Public Highways, which issues permits that remain in force for the calendar year. Cars may be used without registration for not more than three months in one year, if registered in some other province, or for 30 days in one year if registered in certain of the United States which have entered into agreement with the province of Ontario. No person under 16 years old may drive a car, and those between the ages of 16 and 18, as well as all paid chauffeurs, must be licensed. Cars must be equipped with mufflers. The speed limit in cities, towns, and villages is 20 miles an hour, in other places, 25 miles an hour, at road and intersections, one-half of these rates of speed. A motor may not pass a street car which has stopped for passengers to get on or off. At street intersections a vehicle approaching from the right has the right-of-way. All cars are required to be equipped with non-glaring headlights.

**Manitoba.**—Under the Motor Vehicle Act, cars must be registered in the office of the Municipal Commissioner, and the registration is renewable annually on January 1. Chauffeurs must not be under 18 years old, and must have licenses; other drivers must not be under 16 years of age. Cars must have mufflers and

devices to prevent their use when left unattended. The speed limits in cities, towns or villages are 10 miles an hour at street intersections and 15 miles an hour elsewhere. There is also a limit of 20 miles an hour in certain rural municipalities. Motors must stop when behind standing street cars. The provisions of the Act relative to registration and display of registration numbers do not apply to a motor vehicle owned by a non-resident of the province, other than a foreign person, firm or corporation doing business in the province, provided that the owner thereof shall have complied with the provisions of the law of the province, foreign country, state or territory of his residence relative to registration of motor vehicles and the display of his registration number thereon, and shall conspicuously display his registration numbers as required thereby. These provisions, however, shall be operative as to a motor vehicle owned by a non-resident of Manitoba only to the extent that under the laws of the province, foreign country, state or territory of his residence like exemptions and privileges are granted to motor vehicles duly registered under the laws of and owned by residents of Manitoba.

**Saskatchewan.**—The licensing authority under the Vehicles Act is the Provincial Secretary. Licenses expire annually on December 31. Every motor vehicle, except motor cycles, must expose two number plates: one on the front and one on the rear. Motor vehicles must carry lights at night, and the front lights must be dimmed to prevent glare. Motor liverymen must be licensed. Non-residents may use cars for 30 days under permit from the Provincial Secretary without registration in the province. No person under the age of 16 may drive a car, and paid chauffeurs must take out licenses. A chauffeur's license may be granted to applicants over 16 and under 18 on passing special examination test. Cars must have mufflers. There are no speed limits, but special precautions are prescribed against accidents. Motor vehicles must stop for street cars which are taking on or discharging passengers.

**Alberta.**—The law relating to motor vehicles is contained in the Motor Vehicle Act, 1911, and amending Acts, and the Highways Act, 1911. Cars must be registered, with descriptions, in the office of the Provincial Secretary, who issues certificates, which are renewable annually on January 1. Paid chauffeurs must be licensees, and all drivers must not be under 16 years old, if male, or 18 years if female. Cars must be equipped with mufflers. The speed limits are 20 miles an hour in cities, towns and villages, and 10 miles an hour at street crossings and bridges, while there is special provision for speed of fire vehicles going to fires. A motor car may not pass a street car which has stopped for passengers to get on or off. Regulations may be made by the Lieutenant-Governor in Council providing for permits to a resident of the United States or of any province in Canada who has complied with provisions of the law regarding registration of his motor vehicle in the state or province in which he resides, to operate an unregistered car in Alberta. Such exemption or privilege applies to such persons only to the extent to which

under the laws of the said state or province similar exemptions or privileges are granted with respect to motor vehicles registered under the laws of and owned by residents of Alberta. The same applies to drivers' licenses. The Provincial Secretary may revoke or suspend the license of any chauffeur convicted under the provisions of the Liquor Act of selling or having for sale intoxicating liquor. Provision is made for the impounding of cars by the authorities where the owners or drivers are convicted of driving cars while intoxicated or convicted under other sections of the Act relating to speeding and juvenile driving.

**British Columbia.**—Under the Motor Vehicle Act, and amending Acts, cars are required to be registered with the Superintendent of Provincial Police. Licenses expire on December 31. Foreign registered cars may be used for touring in the province under a touring license issued by the Superintendent of Provincial Police. Cars registered outside the province may be used for 90 days free. No person under the age of 17 may drive a car, and paid chauffeurs must take out licenses. The speed limits are: in cities, towns and villages, 15 miles an hour, in wooded country 15 miles, and in open country 30 miles an hour. A motor may not pass a standing street car at more than 5 miles an hour and must stop if it overtakes the car while taking on or discharging passengers.

**Yukon Territory.**—The Motor Vehicle Ordinance, No. 14, 1914, requires all cars to be registered in the office of the Territorial Secretary, who issues certificates, renewable annually on July 15. A non-resident may operate an unregistered motor for not more than 90 days. No male under 16, and no female under 18 years of age may drive a motor. In cities, towns and villages the speed limit is 15 miles an hour, or 10 miles an hour at street intersections.

#### 25.—Speed Limits in miles per hour for Motor Vehicles by Provinces.

Province.	In cities, towns or villages.	At street inter- sections, bridges, etc.	Where closely built up.	Open country.	Wooded country or obstructed view.
	Miles per hour.	Miles per hour.	Miles per hour.	Miles per hour.	Miles per hour.
Prince Edward Island.....	10	—	10	15	12
Nova Scotia.....	15	15	—	25	15
New Brunswick.....	12	—	15	—	20
Quebec.....	16	8	16	25	—
Ontario.....	20	—	—	25	12½
Manitoba.....	15	10	20 <sup>1</sup>	—	—
Alberta.....	20	10	—	—	—
British Columbia.....	15	—	—	30	15
Yukon Territory.....	15	10	—	—	—

NOTE.—Saskatchewan has no specified speed limits. See "Saskatchewan" on page 550.

<sup>1</sup> Limit in certain specified rural municipalities.



## 26.—Number of Motor Vehicles registered in Canada by Provinces, 1907-21.

Year.	P. E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Mani- toba.	Saskat- chewan.	Alberta.	British Colum- bia.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1907.....	-	62	-	254	1,530	-	54	55	175	2,130
1908.....	-	65	104	296	1,754	412	74	65	263	3,033
1909.....	-	69	167	485	2,452	662	149	275	504	4,763
1910.....	-	148	299	786	4,230	1,524	531	423	1,026	8,967
1911.....	-	228	483	1,878	11,339	2,436	1,304	1,631	2,220	21,519
1912.....	-	456	700	3,535	16,266	4,099	2,286	2,505	4,289	34,136
1913.....	26	511	824	5,452	23,700	5,475	4,659	3,773	6,138	50,558
1914.....	31	1,324	1,328	7,413	31,724	7,359	8,020	4,723	7,628	69,598
1915.....	34	1,841	1,900	10,112	42,346	9,225	10,225	5,832	8,360	89,944
1916.....	50	3,012	2,965	15,335	54,375	12,765	15,900	9,516	9,457	123,464
1917.....	303	5,350	5,251	21,213	83,308	17,507	32,505	20,624	11,645	197,799
1918.....	639	8,100	6,434	26,897	114,376	24,012	50,531	29,300	15,370	275,746
1919.....	967	10,210	8,306	33,547	144,804	30,118	56,855	34,000	22,420	341,316
1920.....	1,419	12,450	11,196	41,562	177,561	36,455	60,325	38,015	28,000	407,064
1921.....	1,751	14,205	13,615	54,670	206,521	40,215	61,184	40,235	32,900	465,378

NOTE.—The number of motor vehicles in the Yukon (never more than 100) is included in the totals for Canada, 1914-21. <sup>1</sup>

## 27.—Types of Motor Cars registered in Canada, by Provinces, 1921.

Provinces.	Passenger Cars.	Commercial Cars or Trucks.	Motor Cycles.	Total.
	No.	No.	No.	No.
Prince Edward Island.....	1,679	65	7	1,751
Nova Scotia.....	12,550	1,500	155	14,205
New Brunswick.....	12,585	875	155	13,615
Quebec.....	47,365	5,596	1,709	54,670
Ontario.....	181,978	19,554	4,989	206,521
Manitoba.....	37,415	1,825	975	40,215
Saskatchewan.....	59,061	1,784	339	61,184
Alberta.....	38,171	1,681	383	40,235
British Columbia.....	32,000	<sup>1</sup>	900	32,900
Yukon.....	68	9	5	82
<b>Total.....</b>	<b>422,872</b>	<b>32,889<sup>2</sup></b>	<b>9,617</b>	<b>465,378</b>

<sup>1</sup> Included with passenger cars. <sup>2</sup> Exclusive of British Columbia.

## EXPRESS COMPANIES.

"Express service is an expedited freight service on passenger trains." But express companies do not own the means of performing their services, they use railway facilities by virtue of contracts with the railway companies. Express companies in Canada have had close relations with the railways practically from the beginning.

The Vickers Express Company, at first, did business as a stage company in south-western Ontario. Later it conducted an express business on the Toronto, Grey and Bruce and on the Northern railway. When the Canadian Pacific railway acquired the Toronto, Grey and Bruce, the Vickers Express Company did business for a time in the same car with the Dominion Express Company but soon went out of existence.

The Dominion Express Company had been incorporated in 1882 with a capital stock of \$1,000,000. Between 1882 and 1904 the original shareholders assigned their stock to trustees, who thenceforth

held it for the C.P.R. The transfer of the stock became evident in 1904, when at a special meeting the shareholders of the company increased its capital to \$2,000,000.

In 1865 the Canadian Express Company was incorporated with a nominal capital of \$500,000, of which \$275,200 was subscribed. In 1891 the Grand Trunk Railway Company purchased the capital stock for \$660,000, and thenceforth the stock of the company was held for the Grand Trunk by trustees, all of whom were directors of the railway.

The Canadian Northern Express Company was incorporated in 1902 with a nominal capital of \$1,000,000, of which \$300,000 was issued. Five thousand dollars was paid in cash and the remainder was issued as paid up stock. Mackenzie, Mann and Company, Limited, received all but five \$100 shares, which went to qualify directors. The connection between the railway and the express company consisted in the two companies having practically the same directors.

Since the taking over of the C.N.R. and the G.T.R. by the Government the express businesses of the two have been amalgamated to simplify matters. Beginning September 1, 1921, the operations of the Canadian Express Company and the Canadian National Express Company were consolidated under the name of the second, and the staffs of the two companies were rearranged, where necessary, to constitute the staff of the new company.

Before 1915, an express company in Canada was not liable for delay or damage caused by anything quite beyond its control, thus maintaining itself as an entity separate from the railway company. But in 1915 this liability was qualified, and thenceforth an express company became liable for delay or injury of goods if either were caused by the railway company in whose cars the goods were being carried.

Goods are sent by express for quick transit, so that express companies do not have to compete with freight rates by rail or water. Thus in its first tariff, the Dominion Express Company, in pursuance of its contract with the C.P.R., gave a rate of  $2\frac{1}{2}$  times the maximum first class railway freight rate for the same goods carried the same distance. An express company usually pays the railway company a percentage of its gross earnings; for example, the Canadian Express Company paid the Grand Trunk 50 p.c. But the railway by controlling the stock has an additional revenue; and since express companies have little equipment but offices and, therefore, have slight expenses for upkeep, the railway receives in the end practically all the profits of the express company above bare operating expenses.

**Express Company Operations.**—There were operating in Canada in 1920, the last year for which the statistics of the Transportation Branch of the Dominion Bureau of Statistics are available, five distinctly Canadian express companies, viz., the Canadian Express Co., the Canadian National Express Co., the Central Canada Express Co., the Dominion Express Co., and the British America Express Co. They are organized under powers conferred by Acts

of the Dominion Parliament, and their business consists in the forwarding of parcels through the railway companies, in the transfer of luggage and in the issue of money orders, travellers' cheques, letters of credit and other forms of financial paper. Three other express companies situated in the United States, but consolidated during the war period, like the United States railways, under the operation of a single management appointed by the United States Government, and referred to here as "American Railway," also do business in Canada. The total capital liability of the five Canadian companies on December 31, 1920, stood at \$4,918,800.

Statistics showing the operating mileage of express companies in Canada are given for the last four statistical years in Table 28, of earnings by companies and of operating expenses in Tables 29 and 30 and of the express companies' business in financial paper in Table 31.

28.—Operating Mileage of Express Companies in Canada, by Routes, by Provinces and by Companies, for the years ended June 30, 1918-1919, and for the calendar years 1919 and 1920.

Routes and Provinces.	June 30.		Dec. 31.	
	1918.	1919.	1919.	1920.
	Miles.	Miles.	Miles.	Miles.
By routes over—				
Steam roads.....	39,900.98	40,259.54	40,449.93	40,851.84
Electric lines.....	365.70	336.70	398.50	301.30
Steamboat lines.....	2,945.30	2,912.30	2,912.30	2,862.30
Stage lines.....	36.00	57.00	57.00	84.00
Miscellaneous <sup>1</sup> .....	19,298.00	16,813.00	16,813.00	16,813.00
<b>Totals.....</b>	<b>62,545.88</b>	<b>60,378.54</b>	<b>60,630.73</b>	<b>60,912.44</b>
By Provinces—				
Prince Edward Island.....	495.90	500.05	499.95	499.95
Nova Scotia.....	1,512.27	1,538.27	1,569.07	1,947.07
New Brunswick.....	2,264.27	2,291.28	2,518.79	2,548.78
Quebec.....	6,108.40	6,281.78	5,423.99	5,426.30
Ontario.....	11,107.88	11,178.20	11,907.98	11,701.08
Manitoba.....	4,323.66	4,359.06	4,402.35	4,296.26
Saskatchewan.....	6,155.10	6,124.70	6,148.20	6,167.50
Alberta.....	4,458.50	4,341.60	4,600.90	4,773.80
British Columbia.....	5,846.48	5,889.80	5,755.70	5,777.60
Yukon.....	647.00	728.00	669.00	637.00
Other.....	19,626.52	17,145.80	17,134.80	17,137.10
<b>Totals.....</b>	<b>62,545.88</b>	<b>60,378.54</b>	<b>60,630.73</b>	<b>60,912.44</b>
By companies—				
American Railway Express Co.....	1,189.34	2,821.94 <sup>2</sup>	2,821.94 <sup>2</sup>	2,656.54 <sup>2</sup>
British America Express Co.....	414.04	414.04	414.04	414.04
Canadian Express Co.....	15,077.14	14,855.12	14,963.00	15,308.00
Canadian Northern Express Co.....	8,371.49	8,657.29 <sup>3</sup>	8,809.79 <sup>3</sup>	8,920.70 <sup>3</sup>
Central Canada Express Co.....	728.80	728.80	728.80	728.80
Dominion Express Co.....	35,112.19	32,901.35	32,893.16	32,884.36
Great Northern Express Co.....	675.24	4	4	4
Wells Fargo & Co.....	977.64	4	4	4
<b>Totals.....</b>	<b>62,545.88</b>	<b>60,378.54</b>	<b>60,630.73</b>	<b>60,912.44</b>

<sup>1</sup>The miscellaneous mileage is almost entirely on ocean steamship lines.

<sup>2</sup> American Railway.

<sup>3</sup> Canadian National. <sup>4</sup> Included under American Railway Express Co.

29.—Earnings of Express Companies for the years ended June 30, 1915-1919, and for the calendar years 1919 and 1920.

Companies.	Revenue from transportation.	Money Orders, domestic.	Money Orders, foreign.	Travel-ers' Cheques, domestic.	Travel-ers' Cheques, foreign.
	\$	\$	\$	\$	\$
American Railway Express.....	2,196,022	—	—	—	—
British America Express.....	33,630	—	—	—	—
Canadian Express.....	8,317,465	106,094	—	2,944	—
Canadian National Express.....	3,488,043	27,260	—	—	—
Central Canada Express.....	104,579	—	—	—	—
Dominion Express.....	15,666,545	177,677	33,093	10,052	5,355
<b>Total, 1920, Dec. 31.....</b>	<b>29,806,284</b>	<b>311,031</b>	<b>33,093</b>	<b>12,996</b>	<b>5,355</b>
<b>Total, 1919, Dec. 31.....</b>	<b>24,361,681</b>	<b>233,502</b>	<b>1,089</b>	<b>5,162</b>	<b>1,076</b>
<b>Total, 1919, June 30.....</b>	<b>20,651,772</b>	<b>215,427</b>	<b>1,237</b>	<b>1,617</b>	<b>3,023</b>
<b>Total, 1918, June 30.....</b>	<b>18,116,383</b>	<b>267,154</b>	<b>19,790</b>	<b>1,698</b>	<b>4,311</b>
<b>Total, 1917, June 30.....</b>	<b>16,353,461</b>	<b>239,754</b>	<b>20,727</b>	<b>4,171</b>	<b>2,269</b>
<b>Total, 1916, June 30.....</b>	<b>12,428,645</b>	<b>202,458</b>	<b>23,670</b>	<b>4,515</b>	<b>429</b>
<b>Total, 1915, June 30.....</b>	<b>10,917,619</b>	<b>186,580</b>	<b>15,239</b>	<b>3,429</b>	<b>1,704</b>

Companies.	"C.O.D." Cheques.	Other earnings.	Total earnings.	Total expenses.	Net earnings.
	\$	\$	\$	\$	\$
American Railway Express.....	—	48,515	2,244,537	2,476,798	— 232,261
British America Express.....	—	—	33,630	30,509	— 3,121
Canadian Express.....	63,606	12,724	8,502,833	8,629,215	— 126,382
Canadian National Express.....	43,866	—	3,559,168	3,649,099	— 89,931
Central Canada Express.....	—	—	104,579	99,298	— 5,281
Dominion Express.....	115,049	59,985	16,067,757	17,422,546	— 1,354,789
<b>Total, 1920, Dec. 31.....</b>	<b>222,521</b>	<b>121,224</b>	<b>30,512,504</b>	<b>32,307,465</b>	<b>— 1,794,961</b>
<b>Total, 1919, Dec. 31.....</b>	<b>182,473</b>	<b>571,538</b>	<b>25,356,521</b>	<b>26,330,802</b>	<b>— 974,281</b>
<b>Total, 1919, June 30.....</b>	<b>163,837</b>	<b>506,158</b>	<b>21,543,071</b>	<b>23,295,517</b>	<b>— 1,752,446</b>
<b>Total, 1918, June 30.....</b>	<b>157,933</b>	<b>112,819</b>	<b>18,680,088</b>	<b>18,376,352</b>	<b>303,736</b>
<b>Total, 1917, June 30.....</b>	<b>133,813</b>	<b>82,179</b>	<b>16,836,374</b>	<b>16,010,649</b>	<b>825,725</b>
<b>Total, 1916, June 30.....</b>	<b>116,780</b>	<b>84,132</b>	<b>12,874,902</b>	<b>12,087,210</b>	<b>787,692</b>
<b>Total, 1915, June 30.....</b>	<b>110,829</b>	<b>76,398</b>	<b>11,338,752</b>	<b>11,366,157</b>	<b>— 27,405</b>

<sup>1</sup>Includes \$14,273 revenue from outside operations.

<sup>2</sup>Includes \$26,954 revenue from outside operations.

NOTE.—"American Railway Express" includes the American Express Co., Great Northern Express Co. Wells, Fargo & Co., consolidated during the war under the operation of the United States Government.

30.—Operating Expenses of Express Companies for the years ended June 30, 1915-1919, and for the calendar years 1919 and 1920.

Companies.	Mainten-ance.	Traffic expenses.	Transporta-tion expenses.	General expenses.	Total operating expenses.
	\$	\$	\$	\$	\$
American Railway Express.....	70,003	2,002	1,417,387	54,970	1,544,362
British America Express.....	—	1,111	9,176	3,200	13,487
Canadian Express.....	190,802	14,635	4,262,062	197,860	4,665,359
Canadian National Express.....	53,414	6,723	1,707,416	136,585	1,904,139
Central Canada Expre-s.....	—	148	43,099	7,815	51,061
Dominion Express.....	258,481	89,219	7,044,716	550,057	7,942,472
<b>Total, 1920, Dec. 31.....</b>	<b>572,700</b>	<b>113,838</b>	<b>14,483,856</b>	<b>950,487</b>	<b>16,120,880</b>
<b>Total, 1919, Dec. 31.....</b>	<b>502,452</b>	<b>152,003</b>	<b>11,753,203</b>	<b>814,994</b>	<b>13,222,652</b>
<b>Total, 1919, June 30.....</b>	<b>393,871</b>	<b>92,972</b>	<b>10,566,603</b>	<b>739,053</b>	<b>11,792,499</b>
<b>Total, 1918, June 30.....</b>	<b>341,845</b>	<b>94,008</b>	<b>8,267,730</b>	<b>642,083</b>	<b>9,354,666</b>
<b>Total, 1917, June 30.....</b>	<b>269,576</b>	<b>78,219</b>	<b>6,510,790</b>	<b>829,071</b>	<b>7,687,656</b>
<b>Total, 1916, June 30.....</b>	<b>194,726</b>	<b>73,962</b>	<b>5,041,155</b>	<b>484,674</b>	<b>5,794,517</b>
<b>Total, 1915, June 30.....</b>	<b>107,618</b>	<b>90,693</b>	<b>4,981,846</b>	<b>452,747</b>	<b>5,632,904</b>



**30.—Operating Expenses of Express Companies for the years ended June 30, 1915-1919, and for the calendar years 1919 and 1920—concluded.**

Companies.	Total privileges.	Taxes.	Total expenses.
	\$	\$	\$
American Railway Express.....	918,424	14,012	2,476,798
British America Express.....	16,814	208	30,509
Canadian Express.....	3,898,815	65,041	8,629,215
Canadian National Express.....	1,731,173	13,787	3,649,099
Central Canada Express.....	48,237	—	99,298
Dominion Express.....	9,395,997	84,077	17,422,546
<b>Total, 1920, Dec. 31.....</b>	<b>16,009,460</b>	<b>177,125</b>	<b>32,307,465</b>
<b>Total, 1919, Dec. 31.....</b>	<b>12,936,615</b>	<b>166,535</b>	<b>26,330,802</b>
<b>Total, 1919, June 30.....</b>	<b>11,347,767</b>	<b>155,251</b>	<b>23,295,517</b>
<b>Total, 1918, June 30.....</b>	<b>8,875,181</b>	<b>146,505</b>	<b>18,376,352</b>
<b>Total, 1917, June 30.....</b>	<b>8,052,606</b>	<b>270,387</b>	<b>16,010,648</b>
<b>Total, 1916, June 30.....</b>	<b>6,146,399</b>	<b>146,294</b>	<b>12,087,210</b>
<b>Total, 1915, June 30.....</b>	<b>5,610,224</b>	<b>123,029</b>	<b>11,366,157</b>

**31.—Business transacted by Express Companies in financial paper for the years ended June 30, 1918-1919, and for the calendar years 1919 and 1920.**

Description.	June 30.		Dec. 31.	
	1918.	1919.	1919.	1920.
	\$	\$	\$	\$
Money Orders, domestic.....	59,635,453	49,371,467	52,460,478	65,289,817
Money Orders, foreign.....	2,291,157	2,291,459	2,222,908	2,315,114
Travellers' cheques, domestic.....	2,196,588	552,570	837,093	513,242
Travellers' cheques, foreign.....	174,057	334,153	267,320	226,940
"C.O.D." cheques.....	14,503,936	15,844,486	18,062,985	22,413,731
Telegraphic transfers.....	341,209	269,704	203,333	162,193
Letters of credit issued.....	37,820	—	—	—
Other forms.....	1,236,706	1,609,359	2,639,576	1,668,138
<b>Total.....</b>	<b>80,476,926</b>	<b>70,273,198</b>	<b>76,693,693</b>	<b>92,589,175</b>

### CANALS.

**Historical.**—Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes, and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages. The canals of Canada were, in the main, constructed to eliminate the toil of unloading, transporting, and reloading at the portages.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although for a time the canals were constructed primarily for military purposes, they soon became essential to the commercial life of the country.

**Canal Systems.**—There are six canal systems under the control of the Dominion Government in connection with navigable lakes and rivers. They consist of the canals (1) between Port Arthur or Fort

William and Montreal; (2) from Montreal to the international boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) Trenton, lake Ontario, to lake Huron (not completed); and (6) the St. Peter's canal from the Atlantic ocean to Bras d'Or lakes, Cape Breton. The total length of the waterways comprised within these systems is about 1,594 statute miles, the actual mileage of canals constructed being 117.2.

The St. Lawrence group, part of the Montreal to Port Arthur system, comprises seven separate canals at different points between Montreal and Prescott, not including the so-called "submerged" canal or channel dredged through shallow parts of the river between Montreal and Quebec. Chief of these is the Lachine canal, originally designed to be a mile in length, with a width of 12 feet and a depth of 18 inches. First opened in 1824 and finally completed in 1901, it is now navigable by vessels drawing 14 feet of water.

The Welland canal, connecting lake Ontario with lake Erie, overcomes their difference in level of  $325\frac{1}{2}$  feet. Commenced in 1824, it was opened in 1829, and has since been remodelled on several occasions. At present the channel from Port Colborne to Thorold is being altered to admit the passage of large lake boats, and a new channel from Thorold to a point 3 miles east of Port Dalhousie is in course of construction. The total distance traversed by the New Welland from lake to lake will be 25 miles. The difference of level between the two lakes, will be overcome by seven lift locks, each having a lift of  $46\frac{1}{2}$  feet. The locks are to be 800 feet long and 80 feet wide in the clear and will provide a depth of 30 feet of water over the mitre sills. The width of the canal prism is to be 200 feet. A new breakwater is being built at Port Colborne, extending 2,000 feet farther into the lake than the present breakwater. Extensive harbour works are contemplated for the lake Ontario entrance at Port Weller. It is expected that upon the completion of the New Welland there will be a reduction of about 2 cents a bushel in the freight rate on east-bound grain shipments and that a large proportion of Canadian grain now being shipped by Buffalo and New York will be diverted to the St. Lawrence route.

The Sault Ste. Marie canal, next in importance to the Welland in respect to tonnage carried, was opened for navigation in 1895 and has been of vital importance to the traffic in grain and iron ore on the Great Lakes. Although a marked decrease in tonnage is shown during the last ten years, much of this is due to the depression in the iron industry and to improved facilities offered by the American Sault Ste. Marie canal.

The Rideau Canal route [systems (3) and (4) above], comprising the canals on the Ottawa river, besides those between Ottawa and Kingston, was placed in operation to provide a safer route, for both military and civil purposes, than the St. Lawrence offered. Between the completion of the Rideau Canal in 1834 and the completion of the Grand Trunk railway between Montreal and Toronto, it was regularly used by tens of thousands of immigrants *en route* to Upper Canada.

The Trent canal, a partially completed route between Trenton, on lake Ontario, and Georgian bay, by way of Rice lake, the city of Peterborough and town of Lindsay and lake Simcoe, is as yet of little importance as a traffic route. The abundant power available at many points is, however, of great value to the Ontario Hydro-Electric Power Commission. At Peterborough the canal is equipped with the largest lift-lock in the world.

The St. Peter's canal, constructed between the years 1912 and 1917, connects the Bras d'Or lakes with St. Peter's bay on the south-east coast of Cape Breton island. It consists of a tidal lock 300 feet in length and 48 feet in breadth, and provides for a minimum depth of 18 feet of water on the lock sills.

**Projected Canals.**—Of the proposed canal schemes, the Georgian Bay route and the deepening of the St. Lawrence waterway are the most prominent. The former, first travelled by Champlain in 1615, from Montreal along the Ottawa and French rivers to Georgian bay, has been strongly advocated on numerous occasions. Its great cost, however, and the loss of time in locking, present serious drawbacks to the undertaking. The construction of the proposed deep waterway along the St. Lawrence from lake Ontario to the sea, for purposes of navigation and power development, has for the present been deferred, after consideration by the governments of Canada and the United States.

**Canals and their Traffic Statistics.**—In Table 32 are given the names and locations of the canals of Canada, their length and lock dimensions; in Table 33 statistics of canal traffic during the navigation seasons of 1920 and 1921. Following a decrease in the total tonnage passing through Canadian canals of 1,259,883 in 1920, the season of 1921 shows an increase of 671,638 tons over the previous year, this increase being due to heavy grain shipments on the Welland and St. Lawrence canals in 1921. Depression in the iron industry has caused decreases in traffic through both the Canadian and American canals at Sault Ste. Marie, though recent improvements effected in the American canal have led to a great falling off in the traffic of the Canadian canal, which in 1921 was only 4.68 p.c. of the amount in 1913, the record year. That canal traffic in Canada is mainly a matter of the summer and fall months is shown by the statistics of Table 34. From Table 35 it is evident that farm products and mine products provide the chief traffic for Canadian canals. Table 36 gives the principal articles carried through Canadian canals in 1920 and 1921. Tables 37 and 38 contain the statistics of traffic through the Sault canal and through all Canadian canals for the years 1900 to 1921, inclusive, by nationality of vessel and origin of cargo. Table 39 gives statistics concerning the use of each of the Canadian canals during the navigation seasons 1914 to 1921. In Tables 40 and 41 are given statistics of the sums spent by governments before and since Confederation as current and capital expenditure on the canals of Canada.

**Panama Canal.**—The Panama canal, which was opened to commercial traffic on August 15, 1914, is a waterway which is destined to be of the greatest importance to the British Columbian ports from which vessels now leave direct for Great Britain and European ports throughout the year. During the war the great expectations based upon the opening of the Panama canal were not realized owing to the scarcity of shipping, but with the decline in ocean freight rates an increase in traffic between our Pacific ports and Europe is occurring. Statistics showing the amount of traffic through the Panama canal and the nationality of vessels passing through it are given in Tables 42 and 43. The first cargo of Canadian wheat passed through the canal on February 9, 1921, on the steamer "Buenos Aires," of the Johnson line.

32.—Canals of Canada, Length and Lock Dimensions, 1921.

Name.	Location.	Length in Miles.	Locks.			
			No.	Minimum dimensions.		
				Length.	Width.	Depth.
				Ft.	Ft.	Ft.
St. Lawrence and Great Lakes—						
Lachine.....	Montreal to Lachine.....	8.50	5	270	45	14
Soulanges.....	Cascades Point to Coteau Landing...	14.00	5	280	45	15
Cornwall.....	Cornwall to Dickinson's Landing...	11.00	6	270	45	14
Farran's Point.....	Farran's Point Rapid.....	1.25	1	800	50	14
Rapide Plat.....	Rapide Plat, Morrisburg.....	3.67	2	270	45	14
Galops.....	Iroquois to Cardinal.....	7.33	3	270	45	14
Murray.....	Isthmus of Murray, Bay of Quinte...	5.17	0	—	—	12
Welland.....	Port Dalhousie, Lake Ontario to Port Colborne, Lake Erie.....	26.75	26	270	44	14
Sault Ste. Marie.....	St. Mary's Rapids, 47 miles west of Lake Huron.....	1.41	1	900	60	19.5
Ottawa and Rideau rivers—						
Ste. Anne Lock.....	Junction of St. Lawrence and Ottawa rivers.....	0.12	1	200	45	9
Carillon.....	Carillon Rapids, Ottawa river.....	0.75	2	200	45	9
Grenville.....	Long Sault Rapids, Ottawa river.....	5.75	5	200	45	9
Rideau.....	Ottawa to Kingston.....	126.25	47	134	33	5
	Rideau Lake to Perth (Tay Branch)	7.00	2	134	33	5
Richelieu river.—						
St. Ours Lock.....	St. Ours, Que.....	0.12	1	200	45	7
Chambly.....	Chambly to St. Johns, Que.....	12.00	9	118	22.5	7
Miscellaneous—						
Trent.....	Trenton to Peterborough Lock, Peterborough.....	89.0	18	175	33	8.3
	Peterborough Lock to head of Lake Couchiching.....	114.6	23	134	33	6
	Sturgeon Lake to Port Perry (Scugog Branch).....	30.0	1	142	33	6
St. Peter's.....	St. Peter's Bay to Bras d'Or Lakes, Cape Breton, N.S.....	0.49	1	300	48	18
St. Andrew's.....	Red River, 15 miles north of Winnipeg.....	—	1	215	45	30



## 33.—Canal Traffic during the Navigation Seasons of 1920 and 1921, by direction and origin of Cargo.

Canals.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.	
	Up.	Down.	Up.	Down.	Up.	Down.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1920.						
Sault Ste. Marie.....	238,164	850,828	-	202,855	54,621	862,696
Welland.....	101,016	532,104	97,647	-	950	8,192
St. Lawrence.....	215,226	686,670	379,982	33,280	-	996
Chambly.....	3,466	12,450	210,058	-	-	-
St. Peter's.....	12,739	48,634	-	-	-	-
Murray.....	132,213	2,494	-	-	-	-
Ottawa.....	14,501	179,907	-	32,186	-	-
Rideau.....	68,527	26,543	-	-	-	-
Trent.....	16,457	37,203	-	-	-	-
St. Andrew's.....	5,577	198	-	-	-	-
<b>Total.....</b>	<b>808,786</b>	<b>2,377,031</b>	<b>687,637</b>	<b>268,321</b>	<b>55,571</b>	<b>871,884</b>
1921.						
Sault Ste. Marie.....	208,104	1,187,064	2,241	87,161	56,150	351,023
Welland.....	198,004	1,626,441	61,297	-	12,592	7,123
St. Lawrence.....	398,440	1,758,958	217,446	15,349	750	-
Chambly.....	4,008	7,248	70,335	830	-	-
St. Peter's.....	13,283	42,840	-	-	-	-
Murray.....	44,960	320	-	-	-	-
Ottawa.....	14,593	140,501	-	13,184	-	-
Rideau.....	64,050	28,593	3	-	-	-
Trent.....	14,442	29,805	-	-	-	-
St. Andrew's.....	5,892	339	-	-	-	-
<b>Total.....</b>	<b>965,836</b>	<b>4,822,109</b>	<b>351,322</b>	<b>116,524</b>	<b>69,492</b>	<b>361,146</b>

Canals.	FROM UNITED STATES TO CANADIAN PORTS.		TOTAL FREIGHT.		ORIGIN OF CARGO.		Total Cargo.	Increase(+) or decrease (-) on previous year.
	Up.	Down.	Up.	Down.	Canadian.	United States.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1920.								
Sault Ste. Marie.....	182,564	86,090	475,349	2,002,469	1,286,251	1,191,567	2,477,818	-1,660,267
Welland.....	-	1,535,263	200,518	2,075,559	717,452	1,555,620	2,276,072	+ 105,393
St. Lawrence.....	13,596	1,738,262	608,754	2,459,208	1,285,272	1,782,690	3,067,962	+ 176,343
Chambly.....	-	94,345	213,524	111,798	228,022	97,300	325,322	+ 82,361
St. Peter's.....	-	-	12,739	48,634	61,373	-	61,373	+ 3,506
Murray.....	1,275	250	133,491	2,744	134,707	1,528	136,235	+ 27,985
Ottawa.....	6,735	-	21,236	212,093	226,594	6,735	233,329	+ 14,591
Rideau.....	-	2,767	68,527	29,310	95,002	2,835	97,837	+ 5,702
Trent.....	-	-	16,457	37,203	53,596	64	53,660	+ 707
St. Andrew's.....	-	-	5,577	198	5,775	-	5,775	+ 2,012
<b>Total.....</b>	<b>204,173</b>	<b>3,461,980</b>	<b>1,756,167</b>	<b>6,979,216</b>	<b>4,094,044</b>	<b>4,641,339</b>	<b>8,735,383</b>	<b>-1,259,883</b>
1921.								
Sault Ste. Marie.....	83,029	19,820	349,524	1,648,068	1,483,444	514,148	1,997,592	- 480,226
Welland.....	4,224	1,166,681	276,177	2,800,245	1,036,419	2,040,012	3,076,422	+ 800,350
St. Lawrence.....	3,759	1,339,363	620,395	3,113,670	1,547,743	2,186,322	3,734,065	+ 666,100
Chambly.....	-	97,549	74,343	105,937	82,421	97,859	180,280	+ 145,404
St. Peter's.....	-	-	13,283	42,840	56,123	-	56,123	- 5,230
Murray.....	-	-	44,960	320	45,280	-	45,280	- 90,985
Ottawa.....	3,491	-	18,054	153,685	168,278	3,491	171,769	+ 61,564
Rideau.....	-	2,366	64,053	30,959	92,015	2,997	95,012	- 2,821
Trent.....	-	-	14,442	29,805	44,083	164	44,247	+ 9,410
St. Andrew's.....	-	-	5,892	339	6,231	-	6,231	+ 456
<b>Total.....</b>	<b>94,503</b>	<b>2,626,089</b>	<b>1,481,153</b>	<b>7,925,865</b>	<b>4,562,028</b>	<b>4,844,993</b>	<b>9,407,021</b>	<b>+ 671,638</b>

## 34.—Distribution of Total Canal Traffic, by months, 1916-1921.

Months.	1916.	1917.	1918.	1919.	1920.	1921.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
January.....	—	533	—	759	60	422
April.....	474,710	63,651	88,446	404,928	53,834	248,026
May.....	2,967,906	3,026,990	3,351,440	2,278,145	1,263,740	1,233,905
June.....	4,232,338	3,575,885	2,749,323	1,530,317	1,234,352	1,376,156
July.....	3,655,110	4,013,982	2,580,177	1,483,124	1,272,797	1,456,306
August.....	3,643,436	3,520,647	2,332,796	1,224,110	1,458,549	1,381,327
September.....	3,318,774	2,708,184	2,687,581	1,162,970	1,258,744	1,293,724
October.....	2,754,812	2,544,732	2,940,663	1,100,455	1,217,795	1,425,691
November.....	1,967,168	2,500,096	1,933,627	702,437	856,417	910,420
December.....	569,237	284,235	219,566	108,001	119,095	131,044
<b>Total.....</b>	<b>23,583,491</b>	<b>22,238,935</b>	<b>18,883,619</b>	<b>9,995,266</b>	<b>8,735,383</b>	<b>9,407,021</b>

## 35.—Tonnage of Traffic by Canals and Classes of Products, 1920-1921.

Canals.	Farm Products.	Manu- factures.	Forest Products.	Mine Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
<b>1920.</b>					
Sault Ste. Marie.....	1,047,568	270,179	53,904	1,106,167	2,477,818
Welland.....	438,399	205,214	170,153	1,462,306	2,276,072
St. Lawrence.....	484,188	207,857	531,106	1,844,811	3,067,962
Chambly.....	21,966	19,185	204,684	79,487	325,322
St. Peter's.....	9,924	7,032	1,053	43,364	61,373
Murray.....	—	8,515	—	127,720	136,235
Ottawa.....	5,141	21,860	105,502	100,826	233,329
Rideau.....	3,639	16,996	7,922	69,280	97,837
Trent.....	2,075	1,934	49,466	185	53,660
St. Andrew's.....	101	130	5,274	270	5,775
<b>Total.....</b>	<b>2,013,001</b>	<b>758,902</b>	<b>1,129,064</b>	<b>4,834,416</b>	<b>8,735,383</b>
<b>1921.</b>					
Sault Ste. Marie.....	1,438,140	258,527	45,880	255,045	1,997,592
Welland.....	1,873,943	204,689	155,081	842,709	3,076,422
St. Lawrence.....	1,902,024	295,644	363,412	1,172,985	3,734,065
Chambly.....	6,365	9,516	71,586	92,813	180,280
St. Peter's.....	12,519	6,867	491	36,246	56,123
Murray.....	—	780	75	44,425	45,280
Ottawa.....	5,386	19,767	50,689	95,927	171,769
Rideau.....	2,455	14,197	4,613	73,747	95,012
Trent.....	1,629	2,197	39,855	566	44,247
St. Andrew's.....	3	455	5,730	43	6,231
<b>Total.....</b>	<b>5,242,464</b>	<b>812,639</b>	<b>737,412</b>	<b>2,614,506</b>	<b>9,407,021</b>

## 36.—Principal Articles carried through Canadian Canals during the Navigation Seasons of 1920 and 1921.

Articles.	1920.	1921.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
barley.....	174,386	224,315	49,929	—
oatmeal.....	11	1,729	1,718	—
oats.....	19,232	1,551,947	1,532,715	—
rye.....	156,657	599,066	442,409	—
ye.....	78,965	118,388	39,423	—
lax.....	31,034	40,688	9,654	—
cas.....	19	128	109	—
heat.....	1,248,863	2,172,442	923,579	—
lour.....	252,152	456,093	203,941	—
ay.....	26,557	10,288	—	16,269
ther mill products.....	4,390	44,123	39,733	—
ruit and vegetables.....	4,037	3,549	—	488
atoes.....	4,657	6,012	1,355	—
ve stock.....	1,151	992	—	159
ultry, game and fish.....	1,844	2,984	1,140	—
ressed meats.....	14	30	16	—
her packing house products.....	2,091	2,766	675	—

### 36.—Principal Articles carried through Canadian Canals during the Navigation Seasons of 1920 and 1921—concluded.

Articles.	1920.	1921.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
Hides and leather.....	33	18	-	15
Wool.....	53	17	-	36
All other animal products.....	6,855	6,889	34	-
Agricultural implements.....	5,754	19,757	14,003	-
Cement, bricks and lime.....	52,046	18,300	-	33,746
Household goods and furniture.....	3,445	3,417	-	28
Iron, pig and bloom.....	12,416	7,806	-	4,610
Iron and steel, all other.....	34,328	69,807	35,479	-
Petroleum and other oils.....	174,143	238,993	64,850	-
Sugar.....	17,080	58,681	41,601	-
Salt.....	14,135	10,911	-	3,224
Wines, liquors and beer.....	6,192	5,132	-	1,060
Merchandise not enumerated.....	439,363	379,835	-	59,528
Pulpwood.....	732,662	491,041	-	241,621
Sawed lumber.....	333,773	193,230	-	140,543
Squared timber.....	8,267	11,465	3,198	-
Shingles.....	4,708	3,214	-	1,494
Other woods.....	49,654	38,462	-	11,192
Hard coal.....	360,535	341,522	-	19,013
Soft coal.....	3,038,017	1,651,740	-	1,386,277
Coke.....	2,460	10,202	7,742	-
Copper ore.....	8,076	9,140	1,064	-
Iron ore.....	858,184	127,615	-	730,569
Other ore.....	1,410	9,547	8,137	-
Sand, etc.....	565,734	464,740	-	100,994
<b>Total.....</b>	<b>8,735,383</b>	<b>9,407,021</b>	<b>671,638</b>	<b>-</b>

### 37.—Traffic through the Canadian Sault Ste. Marie Canal during the Navigation Seasons 1900-21, by Nationality of Vessel and Origin of Freight.

Year.	Canadian.		United States.		Total	Total Vessel Tonnage.	Tonnage of Freight.		
	No.	Vessel Tonnage.	No.	Vessel Tonnage.			Canadian.	United States.	Total.
1900....	1,790	577,310	1,291	1,617,438	3,081	2,194,748	255,264	1,780,413	2,035,677
1901....	2,796	775,151	1,408	1,674,597	4,204	2,449,748	494,613	2,325,781	2,820,394
1902....	3,080	1,366,930	1,964	3,237,372	5,044	4,604,302	1,140,623	3,588,645	4,729,268
1903....	2,711	1,615,939	1,640	3,146,807	4,351	4,762,746	1,362,820	4,149,048	5,511,868
1904....	2,637	1,555,042	1,325	2,675,663	3,962	4,230,705	1,212,145	3,818,560	5,030,705
1905....	3,970	1,803,288	1,692	3,734,349	5,662	5,537,637	1,304,355	4,169,051	5,473,406
1906....	3,922	1,959,252	1,758	4,399,872	5,680	6,359,124	1,632,683	4,941,363	6,574,046
1907....	3,217	2,154,688	3,132	9,961,281	6,349	12,115,969	1,957,334	13,630,831	15,588,165
1908....	3,289	2,603,232	2,004	7,035,655	5,293	9,638,887	2,092,231	10,666,985	12,759,216
1909....	2,597	2,983,936	3,734	14,850,738	6,331	17,839,674	3,366,495	24,494,750	27,861,245
1910....	2,744	3,173,494	5,228	20,187,704	7,972	23,361,198	3,345,619	33,050,068	36,395,687
1911....	2,713	3,108,880	4,068	16,252,340	6,781	19,361,220	3,177,581	27,774,128	30,951,709
1912....	2,643	3,296,229	5,213	22,536,015	7,856	25,832,244	4,090,362	35,579,293	39,669,655
1913....	3,279	3,793,434	5,006	22,181,007	8,285	25,974,441	4,954,734	37,744,590	42,699,324
1914....	3,011	3,473,292	2,966	13,827,870	5,977	17,301,162	3,609,747	23,989,437	27,599,184
1915....	3,000	3,041,003	1,331	5,443,812	4,331	8,484,815	2,561,734	5,189,223	7,750,957
1916....	4,595	4,089,937	2,094	8,703,187	6,689	12,793,124	4,155,911	12,657,738	16,813,649
1917....	3,199	3,182,960	2,138	8,712,604	5,337	11,895,564	2,875,590	12,571,502	15,447,092
1918....	3,067	2,436,500	1,992	7,594,042	5,059	10,030,542	1,336,861	11,576,850	12,913,701
1919....	3,140	2,817,096	929	3,671,634	4,069	6,488,730	1,606,311	2,531,774	4,138,085
1920....	3,239	2,415,775	771	2,725,431	4,010	5,141,206	1,286,251	1,191,567	2,477,818
1921....	3,464	2,676,320	399	1,115,072	3,863	3,791,392	1,483,444	514,148	1,997,592

**38.—Traffic through all Canadian Canals during the Navigation Seasons 1900-1921, by Nationality of Vessel and Origin of Freight.**

Year.	Canadian Vessels.		United States Vessels.		Freight Carried.				
	No.	Registered Tonnage.	No.	Registered Tonnage.	Originating in Canada.		Originating in United States.		Total.
					Tons.	Per cent of Total	Tons.	Per cent of Total	
1900..	21,755	4,129,250	5,502	2,408,985	—	—	—	—	5,013,693
1901..	20,860	3,980,264	5,634	2,482,274	—	—	—	—	5,665,259
1902..	22,198	4,485,695	6,433	4,086,439	—	—	—	—	7,513,197
1903..	23,767	5,212,832	6,695	4,236,475	—	—	—	—	9,203,817
1904..	21,851	4,772,100	6,253	3,655,905	—	—	—	—	8,256,236
1905..	23,726	5,191,191	7,085	5,096,241	—	—	—	—	9,371,744
1906..	25,498	5,526,321	7,319	5,685,815	—	—	—	—	10,523,185
1907..	28,833	6,328,911	9,328	11,604,834	—	—	—	—	20,543,639
1908..	29,040	6,780,789	7,489	8,521,139	5,012,147	28.7	12,190,673	71.3	17,502,820
1909..	22,507	7,811,578	9,996	16,459,322	7,378,057	21.8	26,342,691	78.2	33,720,748
1910..	25,337	8,931,790	11,462	21,777,297	7,883,614	18.3	35,106,994	81.7	42,990,608
1911..	25,585	9,172,192	10,370	18,231,622	7,792,907	20.5	30,237,446	79.5	38,030,353
1912..	27,371	10,237,335	11,785	24,636,190	9,376,529	19.7	38,210,716	80.3	47,587,245
1913..	28,654	12,078,041	10,739	24,238,788	11,130,875	21.3	40,923,038	78.7	52,053,913
1914..	26,125	12,050,856	7,742	15,636,414	9,382,206	25.3	27,641,031	74.7	37,023,237
1915..	21,575	9,398,207	6,415	7,385,101	6,789,423	44.7	8,409,380	55.3	15,198,803
1916..	23,002	9,839,029	6,800	10,660,839	7,486,962	31.7	16,096,529	68.3	23,583,491
1917..	21,588	9,831,694	6,594	10,259,772	5,964,369	26.8	16,274,566	73.2	22,238,935
1918..	18,909	7,800,972	6,791	9,616,200	3,369,477	17.8	15,514,142	82.2	18,883,619
1919..	20,682	8,735,973	4,092	5,259,173	4,865,831	48.7	5,129,435	51.3	9,995,266
1920..	23,038	8,521,643	3,826	3,838,890	4,094,044	46.9	4,641,339	53.1	8,735,383
1921..	25,720	10,079,358	2,969	2,330,178	4,562,028	48.5	4,844,593	51.5	9,407,021

NOTE.—For Canadian Canal Traffic from 1886 to 1899, see 1902 Year Book, p. 398.

**39.—Traffic through individual Canadian Canals during the Navigation Seasons 1914-1921.**

SAULT STE. MARIE CANAL.

Year.	Canadian Vessels.				United States Vessels.				Passen- gers.	Freight carried.
	Steam- ers.	Sail.	Total.	Vessel Tonnage.	Steam- ers.	Sail.	Total.	Vessel Tonnage.		
	No.	No.	No.	Tons.	No.	No.	No.	Tons.	No.	Tons.
1914	2,674	337	3,011	3,473,292	2,955	11	2,966	13,827,870	30,446	27,599,184
1915	2,742	258	3,000	3,041,003	1,327	4	1,331	5,443,812	25,047	7,750,957
1916	3,908	687	4,595	4,089,937	2,072	22	2,094	8,703,187	31,734	16,813,649
1917	2,923	276	3,199	3,182,960	2,107	31	2,138	8,712,604	26,555	15,447,092
1918	2,786	281	3,067	2,436,500	1,976	16	1,992	7,594,042	26,986	12,913,711
1919	2,807	333	3,140	2,817,096	890	39	929	3,671,634	41,099	4,138,085
1920	2,882	357	3,239	2,415,775	666	105	771	2,725,431	43,455	2,477,818
1921	3,234	230	3,464	2,676,320	319	80	399	1,115,072	42,767	1,997,592

WELLAND CANAL.

Year.	2,592	310	2,902	2,878,483	735	55	790	757,212	25	3,860,969
1914	2,592	310	2,902	2,878,483	735	55	790	757,212	25	3,860,969
1915	1,760	366	2,126	2,032,348	758	38	796	822,847	7	3,061,012
1916	1,658	434	2,092	1,794,722	786	61	847	718,897	—	2,544,964
1917	2,096	458	2,554	2,244,873	631	66	697	491,388	—	2,490,542
1918	1,726	362	2,088	1,760,301	970	134	1,104	835,088	—	2,174,298
1919	2,038	306	2,344	1,924,419	853	16	869	691,595	—	2,170,779
1920	2,009	421	2,430	2,013,817	610	84	694	514,439	—	2,276,072
1921	2,673	365	3,038	2,761,228	714	18	732	568,143	—	3,076,422

ST. LAWRENCE CANALS.

Year.	5,304	3,678	8,982	4,505,235	854	409	1,263	776,490	106,618	4,391,493
1914	5,304	3,678	8,982	4,505,235	854	409	1,263	776,490	106,618	4,391,493
1915	4,474	2,625	7,099	3,422,991	981	561	1,542	841,792	78,303	3,409,467
1916	4,258	2,359	6,647	3,129,072	1,194	484	1,678	1,016,367	81,623	3,268,064
1917	4,068	3,259	7,327	3,511,986	1,026	348	1,374	819,102	81,249	3,391,114
1918	3,430	2,257	5,687	2,839,918	1,122	488	1,610	970,107	45,943	3,031,134
1919	3,910	1,972	5,882	3,107,773	878	188	1,066	769,172	72,006	2,901,610
1920	3,774	2,371	6,145	3,233,029	545	268	813	442,250	62,397	3,067,962
1921	6,241	2,165	8,406	3,939,233	674	130	804	545,610	56,905	3,734,065



### 39.—Traffic through individual Canadian Canals during the Navigation Seasons, 1914-1921—con.

## CHAMBLY CANAL.

Year.	Canadian Vessels.				United States Vessels.				Passen- gers.	Freight carried.
	Steam- ers.	Sail.	Total.	Vessel Tonnage.	Steam ers.	Sail.	Total.	Vessel Tonnage.		
	No.	No.	No.	Tons.	No.	No.	No.	Tons.	No.	Tons.
1914	167	179	346	52,736	—	2,348	2,348	241,672	2,677	436,905
1915	308	180	488	58,998	1	2,800	2,801	235,193	2,640	478,707
1916	247	261	508	64,064	1	1,810	1,811	186,298	1,669	398,977
1917	142	258	400	65,806	—	2,060	2,060	202,970	707	434,818
1918	146	425	571	86,402	—	1,726	1,726	177,320	1,783	369,186
1919	138	245	383	65,604	1	1,039	1,040	107,605	1,403	242,961
1920	135	365	500	77,666	2	1,293	1,295	134,978	1,206	325,322
1921	260	134	394	58,869	2	842	844	87,931	1,149	180,280

## ST. PETER'S CANAL.

1914	451	741	1,192	80,252	1	7	8	413	351	54,180
1915	37	34	71	5,650	—	—	—	—	8	2,895
1916	30	103	133	9,201	—	—	—	—	6	9,629
1917	316	828	1,144	82,405	1	1	2	89	585	62,254
1918	232	835	1,067	68,741	—	4	4	546	479	59,716
1919	291	864	1,155	78,412	16	1	17	1,522	322	64,879
1920	306	888	1,194	82,908	8	—	8	524	1,881	61,373
1921	340	769	1,109	76,327	4	4	8	698	757	56,123

## MURRAY CANAL.

1914	656	258	914	210,747	47	10	57	2,889	15,893	83,907
1915	478	74	552	124,506	48	—	48	1,407	12,223	30,728
1916	514	135	649	103,260	30	—	30	1,025	4,868	46,680
1917	669	197	866	134,929	25	—	25	2,570	1,996	57,603
1918	342	96	438	114,573	15	—	15	1,146	4	44,735
1919	436	150	586	152,610	16	5	21	2,434	1,099	108,250
1920	504	247	751	142,812	22	11	33	812	3,414	136,235
1921	293	139	432	57,726	41	12	53	1,145	7,104	45,280

## OTTAWA CANAL.

1914	930	1,267	2,197	392,516	—	275	275	27,257	23,835	335,132
1915	788	861	1,649	297,434	—	391	391	39,464	27,258	272,370
1916	782	877	1,659	302,012	—	328	328	33,851	22,812	237,651
1917	693	821	1,514	293,997	—	282	282	29,085	22,774	214,835
1918	572	593	1,165	218,992	—	323	323	34,498	14,939	167,170
1919	510	1,132	1,642	286,089	1	147	148	15,019	21,380	218,438
1920	360	1,013	1,373	249,934	—	178	178	19,195	550	233,329
1921	832	874	1,706	229,469	—	101	101	11,130	2,712	171,769

## RIDEAU CANAL.

1914	2,208	392	2,600	176,904	22	13	35	2,611	19,730	151,739
1915	1,817	253	2,070	144,787	—	6	6	586	18,664	120,781
1916	1,512	160	1,672	117,341	—	12	12	1,214	12,544	105,430
1917	1,350	154	1,504	105,666	—	16	16	1,964	11,552	84,549
1918	1,031	125	1,156	75,487	—	8	8	3,316	16,926	54,136
1919	1,502	331	1,833	122,576	—	2	2	192	17,026	103,539
1920	1,271	438	1,709	118,751	7	2	9	1,124	14,785	97,837
1921	1,227	214	1,441	99,832	—	2	2	204	11,484	95,012

## TRENT CANAL.

1914	2,915	732	3,647	174,647	—	—	—	—	85,218	67,715
1915	2,855	578	3,433	172,780	—	—	—	—	82,391	49,904
1916	3,011	484	3,495	165,486	—	—	—	—	104,736	45,009
1917	2,548	419	2,967	142,979	—	—	—	—	93,599	48,924
1918	2,711	829	3,540	171,996	9	—	9	137	98,437	64,893
1919	3,011	583	3,594	155,895	—	—	—	—	101,561	52,953
1920	4,871	672	5,543	160,584	25	—	25	137	97,849	53,660
1921	4,589	607	5,196	152,870	26	—	26	245	100,049	44,247

### 39.—Traffic through individual Canadian Canals during the Navigation Seasons, 1914-1921—concluded.

ST. ANDREW'S CANAL.

Year.	Canadian Vessels.				United States Vessels.				Passen- gers.	Freight carried.
	Steam- ers.	Sail.	Total.	Vessel Tonnage.	Steam- ers.	Sail.	Total.	Vessel Tonnage.		
	No.	No.	No.	Tons.	No.	No.	No.	Tons.		
1914	197	137	334	106,044	—	—	—	—	—	—
1915	664	423	1,087	97,710	—	—	—	—	2,533	42,013
1916	302	250	552	58,934	—	—	—	—	4,295	21,982
1917	85	28	113	26,093	—	—	—	—	3,656	13,438
1918	99	31	130	23,062	—	—	—	—	5,902	7,174
1919	92	31	123	25,499	—	—	—	—	6,654	4,640
1920	93	61	154	26,367	—	—	—	—	6,160	3,763
1921	76	458	534	27,514	—	—	—	—	4,931	5,775
									7,202	6,231

## SUMMARY.

1914	18,094	8,031	26,125	12,050,856	4,614	3,128	7,742	15,636,414	287,326	37,023,237
1915	15,923	5,652	21,575	9,398,207	3,115	3,300	6,415	7,385,101	250,836	15,198,803
1916	16,222	5,780	22,002	9,839,029	4,083	2,717	6,800	10,660,839	263,648	23,583,491
1917	14,890	6,698	21,588	9,831,694	3,790	2,804	6,594	10,259,772	244,919	22,238,935
1918	13,075	5,834	18,909	7,800,972	4,092	2,699	6,791	9,616,200	212,151	18,883,619
1919	14,735	5,947	20,682	8,735,973	2,655	1,437	4,092	5,259,173	262,056	9,995,266
1920	16,205	6,833	23,038	8,521,643	1,885	1,941	3,826	3,838,890	230,468	8,735,383
1921	19,765	5,955	25,720	10,079,388	1,780	1,189	2,969	2,330,178	230,129	9,407,021

### 40.—Total Expenditure and Revenue of Canals 1868-1921 and before Confederation.

Fiscal Year.	Expenditure Chargeable—					Total Expendi- ture.	Revenue of Canals.
	To Capital.	To Income.	To Revenue. <sup>1</sup>	For Staff.	For Repairs.		
	\$	\$	\$	\$	\$	\$	\$
Before Confed- eration.....	20,593,866	98,378	—	—	—	20,962,244	—
1868-1900.....	58,449,977	2,857,040	820,973	7,618,245	5,915,591	75,661,826	12,401,918
1901.....	2,360,570	147,768	61,939	314,095	262,876	3,147,248	315,426
1902.....	2,114,690	216,703	65,711	317,839	263,768	2,978,771	300,414
1903.....	1,823,274	277,596	63,175	390,282	294,114	2,848,441	230,213
1904.....	1,880,787	302,409	66,067	381,017	350,279	2,980,559	79,537
1905.....	2,071,594	354,353	64,515	431,500	401,743	3,323,705	78,009
1906.....	1,552,121	319,877	62,172	447,963	375,889	2,758,022	108,068
1907 (9 months).....	887,839	264,111	66,251	329,630	287,231	1,835,062	105,003
1908.....	1,723,156	508,010	105,519	473,639	411,661	3,221,985	144,882
1909.....	1,873,869	728,125	106,066	475,515	433,958	3,617,533	199,501
1910.....	1,650,707	489,256	111,756	515,585	491,793	3,259,097	193,384
1911.....	2,349,474	440,270	103,398	511,806	471,530	3,875,978	221,138
1912.....	2,560,939	442,012	110,049	585,000	555,710	4,254,610	264,114
1913.....	2,250,257	331,987	121,371	605,248	535,136	3,852,999	307,568
1914.....	2,820,661	389,285	147,729	642,845	574,039	4,583,559	380,188
1915.....	5,490,796	444,730	140,236	675,771	562,599	7,314,132	427,763
1916.....	6,142,149	397,665	139,952	697,532	529,565	7,906,863	446,722
1917.....	4,304,559	399,414	137,907	700,022	486,168	6,028,100	461,423
1918.....	1,781,957	111,553	149,859	743,857	540,331	3,327,557	414,868
1919.....	2,211,935	164,046	156,558	733,091	698,878	3,964,508	387,655
1920.....	4,579,565	798,113	158,153	745,986	713,335	6,995,152	442,193
1921.....	5,449,962	1,193,143	192,944	815,979	920,993	8,573,021	366,011
<b>Totals.....</b>	<b>136,942,734</b>	<b>11,675,844</b>	<b>3,152,360</b>	<b>19,152,847</b>	<b>16,077,187</b>	<b>87,000,972</b>	<b>18,275,998</b>

<sup>1</sup> Expenditure for Staff and Repairs, Canals in general.

NOTE.—For the years 1868 to 1900, see Canada Year Book, 1916-17, page 462.

# 41.—Capital Expenditure for Construction and Enlargement of Canals for the fiscal years 1868-1921, and before Confederation.

Canals.	Expenditure, Previous Years.	Expenditure, 1920-21.	Total Cost.
Beauharnois.....	\$ 1,636,690	\$ —	\$ 1,636,690
Carillon and Grenville.....	4,191,756	—	4,191,756
Chambly.....	780,996	—	780,996
Cornwall.....	7,246,304	—	7,246,304
Culbute Lock and Dam.....	382,391	—	382,391
Lachine.....	14,132,685	—	14,132,685
Lake St. Francis.....	75,907	—	75,907
Lake St. Louis.....	298,176	—	298,176
Murray.....	1,248,947	—	1,248,947
Rideau.....	4,210,274	—	4,210,274
Sault Ste. Marie.....	4,935,809	—	4,935,809
Soulanges.....	7,904,045	—	7,904,045
St. Anne's Lock and Canal.....	1,170,216	—	1,170,216
St. Lawrence River and Canals—			
North Channel.....	1,995,143	—	1,995,143
River Reaches.....	483,830	—	483,830
Galops Channel.....	1,039,896	—	1,039,896
St. Peter's.....	648,547	—	648,547
St. Ours Lock.....	127,229	—	127,229
Tay.....	489,599	—	489,599
Trent.....	18,274,532	379,664	18,654,196
Welland.....	29,399,406	—	29,399,406
Welland Ship Canal.....	20,270,436	5,070,298	25,340,734
(Farrans Point.....	877,091	—	877,091
Williamsburg { Galops.....	6,143,468	—	6,143,468
Rapide Plat.....	2,159,881	—	2,159,881
Williamsburg.....	1,334,551	—	1,334,551
Canals in general.....	34,967	—	34,967
<b>Totals.....</b>	<b>131,492,772</b>	<b>5,449,962</b>	<b>136,942,734</b>

<sup>1</sup> The records relating to cost of construction by Imperial Government were destroyed by fire in 1852, and the statistics are not included in this table.

# 42.—Traffic through the Panama Canal, by Nationality of Vessels, for the years ended June 30, 1918-1921.

Nationality.	1918.		1919.		1920.		1921.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
	No.	No.	No.	No.	No.	No.	No.	No.
Argentinian.....	—	1	—	—	—	—	—	1
Belgian.....	—	—	—	1	—	1	—	—
Brazilian.....	—	—	—	—	2	1	1	—
British.....	303	396	306	296	393	360	502	470
Canadian.....	—	—	2	—	—	—	—	—
Chilean.....	50	46	48	45	38	41	40	23
Chinese.....	—	2	2	2	2	—	2	—
Colombian.....	—	—	1	—	—	1	—	—
Costa Rican.....	10	10	6	6	—	1	8	8
Cuban.....	—	—	—	—	—	—	—	1
Danish.....	44	56	37	42	4	5	28	32
Dutch.....	31	18	6	13	17	12	26	24
Ecuadorian.....	—	—	—	1	—	—	—	—
Finnish.....	—	—	—	—	—	—	—	2
French.....	19	33	29	75	9	51	26	18
German.....	—	—	—	—	5	12	3	16
Greek.....	1	1	1	2	—	—	—	—
Italian.....	2	2	—	—	13	13	13	12
Japanese.....	33	20	47	40	84	34	86	50
Jugo-Slav.....	—	—	—	—	—	—	1	1
Mexican.....	—	1	—	1	—	—	4	—
Norwegian.....	145	151	56	72	46	60	76	64
Panamanian.....	1	3	—	—	3	1	5	3
Peruvian.....	41	42	34	31	37	38	32	28
Portuguese.....	—	—	—	—	1	1	—	—
Russian.....	—	2	3	—	2	—	1	3
Spanish.....	5	7	2	3	20	21	22	22
Swedish.....	12	14	12	17	10	9	15	10
United States.....	224	404	268	518	493	636	579	631
Uruguayan.....	—	—	—	—	1	—	—	—
<b>Total.....</b>	<b>921</b>	<b>1,209</b>	<b>860</b>	<b>1,165</b>	<b>1,180</b>	<b>1,298</b>	<b>1,471</b>	<b>1,421</b>

43.—Traffic through the Panama Canal, August, 1914, to June, 1921.

From the Panama Canal Record. (Ton=2,240 lbs.)

CANALS

567

Month and Year.	Atlantic to Pacific.				Pacific to Atlantic.				Total.			
	Vessels.	Canal Tonnage.		Cargo, Tons.	Vessels.	Canal Tonnage.		Cargo, Tons.	Vessels.	Canal Tonnage.		Cargo, Tons.
		Gross.	Net.			Gross.	Net.			Gross.	Net.	
1920.												
January.....	113	459,631	350,973	314,510	125	532,393	414,560	580,118	238	992,024	765,533	894,628
February.....	99	469,757	360,502	302,610	109	443,647	342,960	477,878	208	913,404	703,462	780,488
March.....	123	583,485	455,058	428,473	112	472,134	364,304	466,043	235	1,055,619	819,362	894,516
April.....	110	521,017	407,968	398,568	110	529,464	414,503	488,953	220	1,050,481	822,471	887,521
May.....	105	490,765	388,990	418,678	119	590,697	463,029	556,241	224	1,081,462	852,019	974,919
June.....	102	464,877	358,387	424,750	99	456,128	340,325	506,671	201	921,005	704,712	834,421
July.....	107	469,188	361,850	398,317	118	639,891	494,948	488,497	225	1,109,079	856,798	886,814
August.....	143	622,073	492,504	539,954	123	586,398	458,841	500,786	266	1,208,471	951,345	1,040,740
September.....	125	647,033	504,349	444,217	131	646,457	504,436	565,340	256	1,233,470	1,008,785	1,009,557
October.....	119	599,920	470,536	488,713	119	591,016	465,043	502,353	238	1,190,936	935,579	991,066
November.....	123	593,207	467,951	491,109	115	590,865	461,924	493,801	238	1,184,072	929,875	984,910
December.....	145	698,602	554,932	619,451	120	600,262	472,986	457,088	265	1,298,864	1,027,918	1,076,559
Total.....	1,414	6,619,555	5,174,000	5,269,350	1,400	6,679,332	5,203,859	5,966,769	2,814	13,298,887	10,377,859	11,236,119
1921.												
January.....	134	649,877	517,719	557,158	145	733,901	576,604	619,895	279	1,383,778	1,094,323	1,177,053
February.....	114	556,788	435,233	474,872	127	623,181	481,605	478,032	241	1,179,979	916,838	952,904
March.....	140	784,748	613,591	636,579	115	632,472	469,227	447,984	255	1,417,220	1,112,818	1,084,563
April.....	118	615,818	492,506	500,801	109	587,269	462,997	406,812	227	1,203,087	955,503	907,613
May.....	100	529,408	414,429	381,323	110	563,194	450,188	411,412	210	1,092,602	864,617	792,735
June.....	103	520,884	415,302	359,584	89	439,973	346,175	335,136	192	960,857	761,477	694,720
Total.....	709	3,657,533	2,888,780	2,910,317	695	3,579,990	2,816,796	2,659,271	1,404	7,237,523	5,705,576	5,609,588
Total, 1919, Dec. 31.....	966	4,328,383	3,336,050	3,454,046	1,165	4,693,616	3,594,077	4,002,465	2,131	9,021,999	6,930,427	7,456,511
Total, 1918, ".....	850	3,380,341	2,477,146	2,171,258	1,248	5,264,388	3,961,426	5,082,161	2,098	8,644,729	6,438,572	7,553,419
Total, 1917, ".....	948	4,205,809	2,940,696	3,162,398	1,100	4,876,831	3,474,474	4,380,098	2,048	9,082,640	6,414,480	7,512,496
Total, 1916, ".....	627	2,846,406	2,000,260	2,124,918	626	2,728,255	1,933,609	2,806,993	1,253	5,574,661	3,933,869	4,931,911
Total, 1915, ".....	582	2,873,708	1,995,265	2,128,996	588	2,815,112	1,975,091	2,837,564	1,170	5,688,820	3,970,356	4,966,560
Aug. to Dec., 1914.....	181	903,291	647,588	744,682	176	919,763	657,690	1,009,252	357	1,823,054	1,305,278	1,755,934



### SHIPPING.

In the beginning of Canadian shipping furs were carried in canoes by water routes to the ocean ports. After 1665, Talon, as intendant, carried shipping a step beyond this by giving government aid to the building of ships for the West Indies trade and for the French navy, but the industry lost ground through the use of poor materials and the high cost of construction.

With the coming of the U. E. Loyalists and their establishment as farmers in what is now Ontario, western trade took on a different character and set aside the birch bark canoe for the bateau and Durham boat. The route from Montreal to the Upper Lakes was broken at three places—from Montreal to Kingston transportation was by bateau or Durham boat, from Kingston to Queenston schooners were used, then there was the portage road from Queenston to Chippawa and finally schooner again to the destination. The charge for transporting a barrel of rum from Montreal to Kingston was from \$3.00 to \$3.50 and freight charges on other goods were proportions of the rate on this standard article.

In 1809, the "Accommodation", the first Canadian steamship, was built for the Hon. John Molson to run between Montreal and Quebec. By 1818 Molson had formed a company, the St. Lawrence Steamship Company or the Molson Line. On lake Ontario, the "Frontenac", beginning with 1817, was used on a weekly service between York and Prescott, and following this beginning came a period of great activity in lake and river shipping. In 1845, the "Gore" reached lake Huron by way of the Welland canal to carry on transport trade in the Upper Lakes where previously there had not been enough traffic to support a large ship. Shipping on the Upper Lakes became brisker now, for there were settlers to be carried from Buffalo to the western United States and grain to be brought back. In this period Canadian shipping made its profit by carrying American goods, for there was little traffic originating in the Canadian near-West.

After 1850 there was railway competition to contend with. By 1852 Chicago was joined to New York and by 1854 Toronto to Collingwood and Hamilton to Windsor. The competition of railways meant the weeding out of the less efficient ships; passengers now forsook the steamships, and railways took over the transportation of perishable goods. But the new roads opened up traffic areas for water transport as well as for themselves; grain became an important article of lake transportation and the new ships were built for the carriage of bulky commodities.

The building of wooden ships had centered at Quebec ever since the beginnings were made by Talon. In 1825 ships having a tonnage of 24,592 were built there. From this time forth the industry maintained its position until the depression caused by the altered trade relations of Great Britain to Canada. Under the Reciprocity Treaty the industry revived, but after 1865 it declined and practically disappeared as steel ships became more common. Before 1800, fishing had occupied the seamen of the Maritime Provinces,

but in the nineteenth century larger ships were built for foreign trade. Until 1865 the shipbuilding industry advanced in those parts, but by 1871 iron hulls had replaced wooden ships, and further, the years of the Reciprocity Treaty had seen the exportation to the United States of practically all the Maritimes' hackmatac, which was the finest of all soft woods for shipbuilding. The building of passenger boats and freighters is carried on now at various ports on the Great Lakes; in British Columbia, where there is native coal and iron, ships are built, especially at Vancouver, Esquimalt and Prince Rupert.

Ocean shipping was begun only towards the middle of last century with the advent of steamships. In 1833, the *Royal William*, a Canadian ship, which had been built to ply between Quebec and Halifax, crossed the Atlantic from Pictou to London. A few years later, Samuel Cunard enlisted English capital and in 1838 obtained a seven years' contract from the British government to carry mail across the Atlantic. His company, the Cunard line, pursued a conservative course; wooden ships were built for it long after iron hulls were a proven success, likewise paddle wheelers when these had been largely replaced by twin screws. By 1867, the company's business had shifted to New York, and in that year the terminal was moved thither from Halifax. The Allan line had a somewhat similar early history, but it has maintained itself as a Canadian line, pursuing a more modest course than the Cunard in the size and speed of its vessels. Now both the C.P.R. and C.N.R. own ocean fleets as extensions to their railway systems.

**The Department of Marine:**—Administration of the general shipping interests of Canada is divided between the Marine Department and the Department of the Naval Service.<sup>1</sup> The Marine Department includes the control, regulation, management and supervision of various services, chief amongst which are (1) administration of the Canada Shipping Act and other Acts of the Dominion Government relating to marine transportation; (2) pilotage; (3) the construction and maintenance of lighthouses, lightships, fog alarms, buoys and beacons; (4) ports, harbours, piers, wharves and breakwaters; (5) the Meteorological Service of Canada; (6) sick and distressed seamen, and the establishment, regulation and management of marine and seamen's hospitals; (7) river and harbour police; (8) inquiries into the causes of shipwrecks and casualties and the collection of wreck statistics; (9) the inspection of steamboats; (10) the construction and maintenance of the St. Lawrence River Ship Canal and (11) the maintenance of winter communication between Prince Edward Island and the mainland. The net revenue of the Marine Department for the fiscal years ended March 31, 1920 and 1921, was \$303,002 and \$396,617 respectively, and the expenditure for the same periods was \$38,301,080 and \$26,038,902, as compared with \$4,459,165 in the fiscal year ended March 31, 1919.

<sup>1</sup>For information relating to the Department of the Naval Service refer to heading "Naval Service of Canada," in the index.

**Canadian Government Merchant Marine.**—During the closing years of the war, the Dominion Government, realizing the need for a mercantile fleet, not only as a means of developing Canada's export trade but also as a means of assisting our national railways and of providing employment, placed orders with Canadian ship-building firms for the construction of 63 steel cargo vessels of 6 different types. These vessels were intended primarily to co-operate with British shipping in supplying the necessities of war, as well as to provide in times of peace the means of carrying abroad the products of Canada's farms, forests, mines and factories, without which Canada could not hope to take full advantage of the opportunity of expanding her export trade.

Prior to Dec. 31, 1919, 19 vessels had been delivered by the builders. During 1920 the total number delivered was increased to 47, while during 1921 an additional 18 vessels were completed, bringing the total at Dec. 31 of that year up to 65 vessels with a total deadweight tonnage of 380,097. In regard to ownership and operation, a separate company has been organized for each vessel and the capital stock of each is owned by the Canadian Government Merchant Marine, Limited. Under an operating agreement with each of these companies, the Canadian Government Merchant Marine, Limited, operates all of the steamers and keeps a separate account for each company. Promissory notes have been given to the Minister of Finance and Receiver-General for the total capital stock of each vessel, with interest payable at  $5\frac{1}{2}$  p.c. per annum.

According to the second annual report of the Canadian Government Merchant Marine, Limited, a surplus of \$1,004,233 (without provision for interest charges) is shown from the operations of this government-owned fleet as at Dec. 31, 1920. At the close of the third year of operation, however, as a result of the world-wide depression in the shipping industry and particularly of the addition of more ships to the fleet, the annual report as for Dec. 31, 1921, shows a deficit, after all charges, of \$9,116,144. As a result, the Board of Directors has proposed the reduction of the number of vessels to 37, retaining only the larger, speedier and specialized ships, the reduction of the capital cost, (about \$72,500,000) to what may be considered present replacement value (about \$28,500,000), and the payment of interest to the government only if earned after allowing for depreciation.

At present, regular cargo services are maintained to points in the United Kingdom and European Continent, to Australia and New Zealand, to British India and the Straits Settlements, to the West Indies (which is also served by a three-weekly passenger service), to Newfoundland, to South America, to China and Japan and to California. In addition, voyages have been made to many points on the continent, Cuba, the East Indies, Russia and Egypt, exclusive of frequent coastwise service on the Atlantic. A few of the smaller boats have at times been moved to the Great Lakes to assist in the transportations of eastbound grain.



Offices of the company outside of Canada are located in London, in the West Indies, and in Australia, New Zealand and Newfoundland, while agencies give the company representation in all the principal shipping centres of the world.

**Shipping Statistics.**—Of the following Tables 44 to 51 are compiled from the shipping reports of the Department of Customs and Excise and Tables 52 to 59 from the reports of the Department of Marine. Table 44 gives summary statistics by nationalities of sea-going vessels, exclusive of coasting vessels, entered and cleared at Canadian ports during the fiscal years 1920 and 1921. Entrances and clearings of sea-going vessels at principal ports in the fiscal year 1921 are given in Table 45, while Table 46 gives detailed statistics of sea-going vessels by countries, whence arrived and countries to which departed, for 1921. Tables 47 and 48 are historic tables, giving entrances and clearings for sea-going vessels and for sea-going and inland vessels, exclusive of coasting vessels, respectively, from the commencement of the century. Statistics of the coasting trade for the past five years are given in Table 49, and statistics of the trade on the lakes and rivers between Canada and the United States in Table 50. Statistics of vessels built and registered in Canada and sold to other countries are given in Table 51.

In Table 52, taken from the report of the Department of Marine, are statistics showing the number and net tonnage of vessels on the registry of shipping in Canada for 1916 to 1919, the figures showing the effect of the recent ship building programme. Table 53 shows steam boat inspections during the fiscal year 1919-1920. Table 54 shows the number of seamen shipped and discharged at Canadian ports from 1908 to 1919. Table 55 gives the Canadian wrecks and casualties up to 1920 and Table 56 shows the marine and danger signals from 1911 to 1920. Tables 57 and 58 show the current trend of the revenue and expenditure of the Department of Marine, the heavy expenditure in the fiscal years 1920 and 1921 being attributable to the large shipbuilding programme undertaken in those years. Table 59 is an historic table giving revenue and expenditure statistics of the Department of Marine since 1868.

**44.—Sea-going Vessels (exclusive of Coasting Vessels) Entered and Cleared at Canadian Ports during the fiscal years 1920 and 1921.**

Nationalities.	Number of Vessels.	Tons Register.	Freight.		Number of Crew.
			Tons Weight.	Tons Measure- ment.	
<b>1920. ENTERED.</b>					
British.....	2,733	6,035,787	1,124,085	141,593	197,085
Canadian.....	5,783	2,041,096	436,489	135,246	98,866
Foreign.....	8,565	3,933,491	1,317,152	33,199	140,064
<b>Total.....</b>	<b>17,081</b>	<b>12,010,374</b>	<b>2,877,726</b>	<b>310,038</b>	<b>436,015</b>
<b>CLEARED.</b>					
British.....	2,778	6,285,207	4,610,350	833,178	178,998
Canadian.....	6,211	2,393,538	1,111,411	238,091	107,635
Foreign.....	8,788	4,555,635	2,360,627	323,067	154,546
<b>Total.....</b>	<b>17,777</b>	<b>13,234,380</b>	<b>8,082,388</b>	<b>1,394,336</b>	<b>441,179</b>



**44.—Sea-going Vessels (exclusive of Coasting Vessels) Entered and Cleared at Canadian Ports during the fiscal years 1920 and 1921—concluded.**

Nationalities.	Number of Vessels.	Tons Register.	Freight.		Number of Crew.
			Tons Weight.	Tons Measure- ment.	
1920.					
TOTAL ENTERED AND CLEARED.					
British.....	5,511	12,320,994	5,734,435	974,771	376,083
Canadian.....	11,994	4,434,634	1,547,900	373,337	206,501
Foreign.....	17,353	8,489,126	3,677,779	356,266	294,610
<b>Total.....</b>	<b>34,858</b>	<b>25,244,754</b>	<b>10,960,114</b>	<b>1,704,374</b>	<b>877,194</b>
1921.					
ENTERED.					
British.....	2,250	5,389,120	1,091,848	247,897	165,494
Canadian.....	6,234	2,866,100	699,133	89,300	142,198
Foreign.....	8,874	4,261,283	1,306,731	30,295	132,254
<b>Total.....</b>	<b>17,358</b>	<b>12,516,503</b>	<b>3,097,712</b>	<b>367,492</b>	<b>439,946</b>
CLEARED.					
British.....	2,276	5,156,499	3,570,943	827,235	145,786
Canadian.....	6,256	2,644,384	1,453,858	301,259	143,581
Foreign.....	8,750	4,599,343	2,247,502	349,417	143,727
<b>Total.....</b>	<b>17,282</b>	<b>12,400,226</b>	<b>7,272,303</b>	<b>1,477,911</b>	<b>433,094</b>
TOTAL ENTERED AND CLEARED.					
British.....	4,526	10,546,619	4,662,791	1,075,132	311,280
Canadian.....	12,490	5,510,484	2,152,991	390,559	285,779
Foreign.....	17,624	8,860,626	3,554,233	379,712	275,981
<b>Total.....</b>	<b>34,640</b>	<b>24,916,729</b>	<b>10,370,015</b>	<b>1,845,403</b>	<b>873,040</b>

**45.—Sea-going Vessels Entered and Cleared at the Principal Ports of Canada, fiscal year, 1921.**

Ports.	British.		Foreign.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Anyox, B.C.....	15	5,594	21	10,637	36	16,231
Arichat, N.S.....	122	2,599	4	178	126	2,777
Baddeck, N.S.....	74	11,461	46	56,840	120	68,301
Bathurst, N.B.....	37	10,001	14	18,476	51	28,477
Bridgewater, N.S.....	24	7,510	12	5,536	36	13,046
Britannia Beach, B.C.....	203	70,915	14	2,676	217	73,591
Campbellton, N.B.....	22	32,940	20	17,108	42	50,048
Campobello, N.B.....	286	48,776	365	8,209	651	56,985
Canso, N.S.....	161	21,169	153	9,653	314	30,822
Charlottetown, P.E.I.....	40	19,124	1	211	41	19,335
Chatham, N.B.....	14	26,194	37	40,821	51	67,015
Chemainus, B.C.....	31	20,411	61	28,142	92	48,553
Clark's Harbour, N.S.....	14	414	59	9,935	73	1,349
Digby, N.S.....	23	4,666	9	1,885	37	6,551
Gaspé, Que.....	30	36,961	39	54,577	69	91,538
Halifax, N.S.....	1,281	2,151,871	558	935,388	1,839	3,087,259
Hantsport, N.S.....	18	21,302	9	15,718	27	37,020
Hillsboro, N.B.....	30	31,682	5	5,490	35	37,172
Ladysmith, B.C.....	288	52,247	303	108,994	591	161,241
La Have, N.S.....	188	25,929	9	227	197	26,156
Liverpool, N.S.....	157	17,463	314	22,115	471	39,578
Lockport, N.S.....	68	2,385	89	5,217	157	7,602
Lord's Cove, N.B.....	411	3,731	309	3,685	720	7,416
Louisburg, N.S.....	268	227,024	360	151,795	628	378,819
Lower East Pubnico, N.S.....	38	1,594	79	3,896	117	5,490
Lunenburg, N.S.....	514	63,975	30	2,588	544	66,563
Moncton, N.B.....	10	13,376	16	11,400	26	24,776
Montreal, Que.....	812	3,010,986	313	825,917	1,125	3,836,903
Nanaimo, B.C.....	384	88,262	1,875	312,456	2,259	400,718
New Westminster, B.C.....	12	11,473	16	35,451	28	46,925
North Head, N.B.....	302	48,838	28	347	330	49,184

**45.—Sea-going Vessels Entered and Cleared at the Principal Ports of Canada,  
fiscal year, 1921—concluded.**

Ports.	British.		Foreign.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
North Sydney, N.S.	1,285	424,580	357	235,729	1,642	660,309
Ocean Falls, N.S.	85	150,951	161	207,274	246	358,225
Parrsboro, N.S.	99	34,113	86	27,538	185	61,651
Pictou, N.S.	12	14,338	5	2,676	17	17,014
Powell River, B.C.	91	76,700	195	97,244	286	173,944
Port Hawkesbury, N.S.	167	26,914	13	8,077	180	34,991
Prince Rupert, B.C.	12	18,181	51	70,174	63	88,355
Quebec, Que.	1,500	134,687	2,602	112,473	4,102	247,160
Rimouski, Que.	333	1,396,658	49	87,598	382	1,484,256
St. Andrews, N.B.	18	33,902	4	6,116	22	40,018
St. George, N.B.	566	46,947	1,618	29,406	2,184	76,353
St. John, N.B.	44	4,910	149	7,507	193	12,417
St. Martin's, N.B.	614	1,386,365	1,109	559,865	1,723	1,946,230
St. Stephens, N.B.	45	23,679	82	13,574	127	37,253
Sandy Point, N.S.	26	591	125	2,858	151	3,449
Shelburne, N.S.	32	4,625	206	15,113	238	19,738
Sidney, B.C.	23	3,953	95	9,362	118	13,315
Steveston, B.C.	58	15,496	91	52,001	149	67,497
Sydney, N.S.	100	3,859	55	1,823	155	5,682
Three Rivers, Que.	843	1,205,020	403	424,839	1,246	1,629,859
Union Bay, B.C.	37	104,132	4	5,362	41	109,494
Vancouver, B.C.	115	338,496	321	303,379	436	641,875
Victoria, B.C.	1,534	2,370,350	1,080	1,557,791	2,614	3,928,147
White Rock, B.C.	1,809	1,594,092	1,799	2,127,983	3,608	3,722,075
Windsor, N.S.	98	2,585	52	512	150	3,097
Yarmouth, N.S.	174	152,309	99	78,167	273	230,476
	454	313,912	171	14,302	625	328,214

**46.—Sea-going Vessels Entered Inwards and Outwards by Countries, 1921.**

VESSELS ENTERED INWARDS.

Countries whence arrived.	British.			Canadian.			Foreign.		
	No. of Ves- sels.	Tons Register.	Crew No.	No. of Ves- sels.	Tons Register.	Crew No.	No. of Ves- sels.	Tons Register.	Crew No.
Great Britain	672	3,027,799	95,340	154	260,126	4,337	92	209,077	3,194
Australia	31	156,221	4,699	6	20,318	266	—	—	—
Gibraltar	11	35,204	462	1	100	7	36	89,675	1,462
British W. Indies	63	152,610	5,948	148	70,703	1,519	5	3,483	84
Newfoundland	753	386,617	13,581	415	237,933	7,014	53	72,904	1,460
Other British possessions	12	40,531	659	6	15,544	261	5	10,669	163
Belgium	42	231,528	7,690	—	—	—	12	35,128	512
China	18	112,493	1,952	41	261,032	17,346	4	12,136	211
France	41	107,811	1,704	4	11,091	149	55	145,396	2,341
Denmark	—	—	—	—	—	—	19	22,109	335
Holland	7	29,296	347	—	—	—	48	126,568	1,749
Italy	14	35,705	471	2	5,470	81	41	108,106	1,693
Japan	10	42,244	732	6	24,627	1,918	81	426,315	10,013
Mexico	—	—	—	2	2,791	42	40	193,846	1,503
Norway	1	2,115	23	—	—	—	29	68,965	880
Peru	6	17,688	274	4	5,556	98	11	35,687	395
St. Pierre	29	2,125	169	36	5,377	295	164	30,859	6,464
Russia	4	26,087	657	—	—	—	—	—	—
Spain	9	12,273	196	11	3,259	82	14	19,740	436
United States	343	867,685	25,511	3,622	1,789,138	91,904	5,805	2,415,932	77,317
Sea Fisheries	151	12,884	3,000	1,725	80,382	15,575	2,280	70,683	19,189
Other countries	23	78,110	1,245	47	69,962	1,242	69	155,317	2,254
Sea, Cable and Admiralty	10	12,094	834	4	2,691	72	11	8,688	599
<b>Total</b>	<b>2,250</b>	<b>5,359,120</b>	<b>165,494</b>	<b>6,234</b>	<b>2,866,100</b>	<b>142,198</b>	<b>8,874</b>	<b>4,261,283</b>	<b>132,254</b>

## 46.—Sea-going Vessels Entered Inwards and Outwards by Countries, 1921—concluded.

## VESSELS ENTERED OUTWARDS.

Countries to which departed.	British.			Canadian.			Foreign.		
	No. of Vessels.	Tons Register.	Crew No.	No. of Vessels.	Tons Register.	Crew No.	No. of Vessels.	Tons Register.	Crew No.
Great Britain.....	586	2,372,906	65,451	176	348,812	6,112	132	234,194	3,427
Australia.....	51	237,369	5,963	11	36,570	450	3	4,899	55
British Oceania.....	15	54,480	1,138	8	27,078	324	6	15,516	284
British South Africa.....	38	123,622	1,883	1	646	16	17	34,986	466
British West Indies.....	2	445	13	71	57,657	1,296	13	17,930	412
Newfoundland.....	754	345,947	14,148	462	255,190	7,468	32	30,481	620
British Guiana.....	26	73,557	2,806	12	14,896	304	—	—	—
Gibraltar.....	8	27,999	357	—	—	—	15	40,185	630
Other British possessions.....	19	79,838	1,237	8	17,192	308	3	7,734	92
Argentina.....	10	25,963	435	13	35,836	474	19	23,235	323
Belgium.....	34	158,537	4,692	—	—	—	28	95,620	1,379
China.....	19	120,998	2,203	51	310,369	19,588	3	10,447	256
Cuba.....	3	1,099	24	43	29,347	671	23	17,676	390
Brazil.....	4	1,020	26	8	11,176	160	1	1,062	12
France.....	70	204,266	4,035	4	4,849	100	91	130,318	3,266
Greece.....	13	39,608	532	—	—	—	18	43,824	633
Holland.....	14	48,029	666	1	387	7	35	70,303	1,094
Italy.....	13	39,243	532	2	4,300	53	73	217,144	3,166
Japan.....	20	97,378	1,965	1	3,039	274	73	369,888	7,956
Mexico.....	1	3,407	37	3	3,133	57	36	165,406	1,311
Norway.....	—	—	—	1	3,007	45	26	70,731	1,013
Peru.....	2	5,896	101	2	2,768	50	2	2,709	47
St. Pierre.....	30	2,544	220	46	7,520	401	46	10,178	994
United States.....	321	957,857	30,365	3,542	1,383,017	89,481	5,049	2,778,157	83,654
Sea fisheries.....	176	22,321	3,957	1,733	64,328	15,396	2,950	103,200	29,614
Other countries.....	34	97,124	1,907	56	23,041	534	43	95,179	1,896
Sea, Cable and Admiralty.....	13	15,046	1,093	1	226	12	13	8,341	737
<b>Total.....</b>	<b>2,276</b>	<b>5,156,499</b>	<b>145,786</b>	<b>6,256</b>	<b>2,644,384</b>	<b>143,551</b>	<b>8,750</b>	<b>4,599,343</b>	<b>143,727</b>

## 47.—Sea-going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, 1901-1921.

Fiscal Years.	British.		Canadian.		Foreign.		Total Tonnage.
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	
1901.....	4,319	6,694,133	9,910	1,677,138	12,476	6,171,791	14,543,062
1902.....	4,363	6,865,924	11,413	1,937,227	14,530	5,928,337	14,731,488
1903.....	4,647	7,753,788	11,282	2,085,568	12,403	6,001,819	15,841,175
1904.....	4,997	8,045,817	11,045	1,979,803	14,002	5,801,085	15,826,705
1905.....	4,614	8,034,652	11,279	2,269,834	11,904	5,283,969	15,588,455
1906.....	5,104	9,059,453	12,201	2,304,942	12,511	5,479,034	16,843,429
1907 (9 mos.).....	4,488	7,576,721	7,880	1,899,141	8,107	4,429,012	13,904,874
1908.....	6,356	10,329,515	10,562	2,606,660	12,886	6,555,096	19,491,271
1909.....	5,795	10,405,370	10,046	2,806,278	13,441	6,554,228	19,765,876
1910.....	5,780	11,038,709	10,875	3,498,361	13,147	6,267,243	20,804,312
1911.....	6,870	12,712,337	10,607	3,341,998	12,467	6,242,851	22,297,186
1912.....	6,766	13,342,929	10,966	4,618,163	15,134	6,628,513	24,589,605
1913.....	7,307	13,896,353	11,810	4,530,835	16,549	7,803,910	26,231,098
1914.....	7,418	15,711,849	12,786	5,160,799	15,811	8,695,838	29,568,486
1915.....	6,949	13,931,091	11,903	4,005,011	15,060	7,466,484	25,402,586
1916.....	6,817	12,417,944	12,386	3,894,731	18,559	8,514,975	24,827,650
1917.....	7,387	16,144,873	12,241	4,343,448	18,500	8,778,753	29,267,071
1918.....	7,337	16,959,790	10,998	4,343,853	16,597	11,483,484	32,787,121
1919.....	6,099	14,054,166	11,115	3,758,528	15,132	7,448,699	25,261,391
1920.....	5,511	12,320,994	11,994	4,434,634	17,353	8,489,126	25,244,751
1921.....	4,526	10,545,619	12,490	5,510,484	17,624	8,860,626	24,916,721

NOTE.—For 1868-1900, see Canada Year Book, 1911, p. 379.

**48.—Sea-going and Inland Vessels (exclusive of Coasting Vessels) arrived at and departed from Canadian Ports, 1901-1921.**

Fiscal Years.	British.		Canadian.		Foreign.		Total Tonnage.
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	
1901.....	4,319	6,694,133	30,211	8,540,089	33,302	10,795,586	26,029,808
1902.....	4,363	6,865,924	33,202	9,654,528	40,148	13,504,952	30,025,404
1903.....	4,647	7,753,788	31,534	10,482,940	53,545	15,418,315	33,655,043
1904.....	4,997	8,045,817	30,934	9,995,290	35,739	13,201,098	31,202,205
1905.....	4,614	8,034,652	29,729	11,047,447	35,647	13,195,721	32,277,820
1906.....	5,104	9,059,453	32,239	11,241,915	37,644	14,430,804	34,732,172
1907 (9 mos.).....	4,408	7,576,721	30,654	11,582,409	25,263	11,436,761	30,595,891
1908.....	6,356	10,329,515	28,795	11,717,846	40,461	17,527,670	39,575,031
1909.....	5,795	10,405,370	29,247	13,805,790	38,677	16,490,443	40,701,603
1910.....	5,780	11,038,709	28,635	15,680,534	41,650	17,848,748	44,567,991
1911.....	6,870	12,712,337	29,670	16,380,146	40,892	18,337,062	47,429,545
1912.....	6,766	13,342,929	27,949	18,069,983	45,399	21,560,215	52,973,127
1913.....	7,307	13,896,353	42,624	20,677,938	47,303	23,275,492	57,849,783
1914.....	7,418	15,711,849	30,234	17,026,121	55,835	29,181,513	61,919,483
1915.....	6,949	13,931,091	29,359	17,504,751	48,635	22,168,311	53,604,153
1916.....	6,817	12,417,944	37,900	17,372,836	75,411	27,930,318	57,721,098
1917.....	7,387	16,144,873	39,978	20,290,252	74,850	29,277,419	65,712,544
1918.....	7,337	16,959,790	34,786	19,890,461	70,781	29,952,237	66,802,488
1919.....	6,099	14,054,166	37,023	17,567,061	52,273	21,607,821	53,229,048
1920.....	5,511	12,320,994	37,388	16,869,619	52,827	20,302,920	49,493,533
1921.....	4,526	10,545,619	39,877	22,236,962	50,370	21,866,049	54,648,630

NOTE.—For 1868-1900, see Canada Year Book, 1911, p. 380.

**49.—British and Foreign Vessels employed in the Coasting Trade of Canada, 1917-1921.**

	1917.	1918.	1919.	1920.	1921.
<b>VESSELS ARRIVED—</b>					
<b>British—</b>					
Steam.....No.	65,846	63,586	59,076	61,859	61,187
Tons register.....	29,433,729	28,208,601	24,666,439	27,711,784	25,294,751
Number of crew.....	1,304,873	1,210,763	1,129,514	1,209,243	1,207,878
Sail.....No.	17,161	14,945	13,552	13,143	12,505
Tons register.....	3,260,636	3,082,450	2,868,481	2,785,198	2,790,484
Number of crew.....	65,247	54,663	49,230	48,798	51,958
<b>Foreign—</b>					
Steam.....No.	391	479	701	594	680
Tons register.....	299,883	681,724	756,161	521,771	428,017
Number of crew.....	7,142	11,515	16,310	12,381	11,092
Sail.....No.	418	296	343	204	160
Tons register.....	79,144	43,914	116,790	50,069	54,293
Number of crew.....	3,257	1,871	2,027	1,227	1,054
<b>Description of vessels—</b>					
Steam, screw.....No.	59,680	58,745	54,465	56,922	56,095
Steam, paddle.....	5,057	4,088	3,841	3,737	4,043
Steam, sternwheel.....	1,500	1,232	1,471	1,794	1,729
Sail, ships.....	38	—	1	3	7
Sail, barks.....	932	1	2	3	2
Sail, barkentines.....	10	1	1	2	4
Sail, brigantines.....	1	—	2	—	3
Sail, schooners.....	13,347	11,733	10,031	9,625	8,810
Sail, sloops, barges, canal boats, etc.....	3,251	3,506	3,858	3,714	3,839
<b>VESSELS DEPARTED—</b>					
<b>British—</b>					
Steam.....No.	62,500	60,750	56,407	59,004	59,794
Tons register.....	28,411,647	26,033,657	22,652,010	26,414,821	24,793,946
Number of crew.....	1,242,047	1,160,981	1,083,012	1,153,433	1,191,554
Sail.....No.	17,507	15,217	15,221	12,859	11,944
Tons register.....	3,204,652	2,910,028	2,781,176	2,660,725	2,578,804
Number of crew.....	64,303	56,502	47,844	46,155	40,892



**49.—British and Foreign Vessels employed in the Coasting Trade of Canada,  
1917-1921—concluded.**

	1917.	1918.	1919.	1920.	1921.
<b>VESSELS DEPARTED—concluded.</b>					
Foreign—					
Steam.....No.	260	354	558	454	566
Tons register.....	118,383	457,605	543,600	350,310	351,522
Number of crew.....	3,742	7,846	10,813	8,624	8,697
Sail.....No.	376	311	266	262	152
Tons register.....	87,548	44,621	118,668	57,950	49,396
Number of crew.....	3,184	1,613	2,442	1,400	731
Description of Vessels—					
Steam, screw.....No.	56,569	55,928	51,994	54,334	54,481
Steam, paddle....."	4,703	3,948	3,486	3,323	4,251
Steam, sternwheel....."	1,488	1,228	1,485	1,801	1,628
Sail, ships....."	26	—	1	1	2
Sail, barks....."	934	—	2	6	5
Sail, barkentines....."	11	1	1	2	1
Sail, brigantines....."	2	2	1	—	5
Sail, schooners....."	13,665	12,050	11,787	9,465	8,638
Sail, sloops, barges, canal boats, etc....."	3,245	3,475	3,695	3,647	3,445

**50.—Canadian and American Vessels, trading on Rivers and Lakes between Canada  
and United States, exclusive of ferriage, 1917-1921.**

	1917.	1918.	1919.	1920.	1921.
<b>VESSELS ARRIVED—</b>					
Canadian—					
Steam.....No.	13,026	10,292	11,774	11,587	12,420
Tons register.....	7,697,451	7,326,058	6,664,144	5,883,911	7,884,184
Number of crew.....	239,914	275,804	207,523	235,403	288,117
Sail.....No.	875	1,518	1,087	967	1,298
Tons register.....	341,931	418,482	416,124	269,908	404,180
Number of crew.....	4,387	5,475	5,132	3,653	4,917
American—					
Steam.....No.	25,788	24,594	16,325	16,499	14,089
Tons register.....	9,617,072	8,643,144	6,708,059	5,611,030	6,059,357
Number of crew.....	275,494	264,221	180,420	191,569	169,904
Sail.....No.	2,139	2,196	2,034	1,147	1,550
Tons register.....	622,010	661,297	521,317	319,415	480,733
Number of crew.....	7,693	7,348	6,589	3,912	6,366
Description of Vessels—					
Steam, screw.....No.	36,200	32,923	26,992	26,664	25,118
Steam, paddle....."	2,562	1,911	1,031	1,384	1,359
Steam, sternwheel....."	52	52	76	38	32
Sail, schooners....."	781	1,063	729	642	809
Sail, sloops....."	18	21	17	11	13
Sail, barges....."	2,215	1,970	2,375	1,461	2,026
Sail, barks....."	—	660	—	—	—
<b>VESSELS DEPARTED—</b>					
Canadian—					
Steam.....No.	12,941	10,454	11,896	11,847	12,384
Tons register.....	7,565,126	7,351,692	6,320,430	5,976,120	8,046,127
Number of crew.....	250,397	223,094	217,673	236,263	261,338
Sail.....No.	895	1,524	1,151	993	1,255
Tons register.....	342,296	450,376	407,835	305,046	391,987
Number of crew.....	4,555	5,574	5,009	3,963	5,186
American—					
Steam.....No.	25,455	24,419	16,160	16,249	15,140
Tons register.....	9,550,386	8,417,326	6,385,048	5,532,981	5,947,482
Number of crew.....	272,675	270,472	178,345	184,109	169,675
Sail.....No.	2,968	2,975	2,622	1,579	1,967
Tons register.....	709,198	746,986	544,698	350,468	517,851
Number of crew.....	9,077	8,426	7,610	5,150	6,398
Description of Vessels—					
Steam, screw.....No.	35,764	32,901	26,983	26,672	26,384
Steam, paddle....."	2,560	1,697	1,027	1,386	1,097
Steam, sternwheel....."	72	275	46	38	43
Sail, schooners....."	938	869	716	677	536
Sail, sloops....."	4	22	22	10	16
Sail, barges....."	2,921	3,608	3,035	1,885	2,700

**51.—Vessels built and registered in Canada and Vessels sold to other Countries, fiscal years 1901-1921.**

Fiscal Year.	Built.		Registered.		Sold to other Countries.		
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	Value.
1901.....	240	21,956	327	35,156			\$
1902.....	260	28,288	316	34,236	5	4,490	66,468
1903.....	295	30,856	312	41,405	27	11,360	235,865
1904.....	214	28,897	243	33,192	21	11,172	220,602
1905.....	248	21,865	335	27,583	11	7,208	87,115
					21	3,696	100,363
1906.....	323	18,724	420	37,639			
1907 (9 months).....	229	33,205	257	31,635	45	9,487	187,725
1908.....	361	49,928	357	78,144	17	3,855	68,190
1909.....	303	29,023	277	32,899	28	4,515	132,900
1910.....	264	24,059	220	33,383	16	3,644	98,643
					14	5,047	133,800
1911.....	247	22,812	234	50,006			
1912.....	326	31,065	302	30,021	17	5,885	201,526
1913.....	324	24,325	328	30,225	18	4,265	110,350
1914.....	289	46,887	230	46,009	20	7,976	610,650
1915.....	224	45,721	237	55,384	27	8,258	169,618
					21	17,044	1,150,950
1916.....	167	13,497	325	102,239			
1917.....	184	28,638	334	105,826	21	4,529	192,575
1918.....	216	53,912	336	70,350	47	24,954	4,398,570
1919.....	277	104,444	327	102,883	63	25,252	5,330,850
1920.....	352	164,074	459	237,022	85	48,965	14,612,338
1921.....	220	95,838	323	188,915	68	53,407	17,819,477
					69	34,623	8,456,573

NOTE.—For 1874-1900, see Canada Year Book, 1911, p. 383.

**52.—Number and Net Tonnage of Vessels on the Registry of Shipping, Canada, calendar years 1916-1920.**

Description.	1916.		1917.		1918.		1919.		1920.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Steamers <sup>1</sup> .....	4,202	491,550	4,264	523,200	4,366	555,983	4,442	605,426	4,281	676,259
Ships.....	3	2,791	2	1,364	1	11	1	11	1	11
Barks.....	12	14,442	12	14,128	12	14,128	12	14,056	12	14,056
Barkentines.....	9	5,329	7	4,269	6	4,093	7	4,726	6	1,329
Brigantines.....	7	1,013	5	818	4	599	4	599	4	599
Schooners.....	2,565	155,331	2,471	158,438	2,307	157,940	2,237	178,500	2,904	171,284
Sloops.....	589	18,417	558	16,213	536	17,861	526	17,678	420	15,761
Barges.....	528	98,741	493	95,650	493	96,364	479	98,157	436	98,668
Scows.....	495	73,529	499	75,277	594	87,612	624	91,735	610	91,570
Yachts.....	1	3	—	—	—	—	—	—	—	—
Yawls.....	14	360	14	360	13	352	13	352	13	352
Cutters.....	9	99	9	99	9	99	9	99	4	42
Drill boats.....	4	1,379	4	1,379	4	1,379	4	1,379	4	1,379
Drill scows.....	1	15	1	15	1	15	1	15	1	15
Dredges.....	189	59,440	189	59,536	192	59,664	185	57,516	180	56,142
House-boats.....	11	1,035	11	1,035	11	1,035	10	971	9	838
Horse-ferries.....	3	42	3	42	2	30	1	14	1	14
Floating lights.....	6	331	6	331	6	329	6	331	6	331
Pile drivers.....	1	17	1	17	1	17	1	17	1	17
Light ships.....	4	472	4	472	4	472	4	472	4	472
Cat boats and luggers.....	1 <sup>2</sup>	6	1 <sup>2</sup>	6	1 <sup>2</sup>	6	—	—	—	—
Lighters.....	2	238	2	238	2	238	3	516	3	516
Floating dry docks.....	1	17,964	1	17,964	1	17,964	2	18,738	2	18,738
Rock breakers.....	2	587	2	587	2	587	2	587	2	587
Total.....	8,659	943,131	8,559	971,438	8,568	1,016,778	8,573	1,091,895	8,904	1,151,980

<sup>1</sup>Including 273 paddle-wheel steamers with a registered tonnage of 55,099 tons and 4,008 screw steamers with a registered tonnage of 621,160 tons for the year 1920. <sup>2</sup>Lugger only.

## 53.—Steamboat Inspection during the Fiscal Year 1919-1920.

Division.	Number of Vessels Inspected.				Number of Vessels not Inspected.	
	Vessels registered or owned in the Dominion.		Vessels registered or owned elsewhere.			
	No.	Gross Tonnage.	No.	Gross Tonnage.	No.	Gross Tonnage.
Halifax.....	160	76,841	14	30,837	28	3,680
St. John, N.B.....	108	48,310	4	10,863	42	9,552
Quebec.....	100	28,748	2	504	9	644
Sorel.....	94	43,054	—	—	30	9,801
Montreal.....	169	73,323	2	3,529	79	14,281
Kingston.....	97	39,695	11	9,676	38	3,870
Toronto.....	286	263,837	36	30,373	69	10,732
Collingwood.....	82	33,222	—	—	13	1,846
Port Arthur.....	68	32,792	1	681	69	6,938
Edmonton.....	57	8,163	—	—	14	1,135
Vancouver.....	211	116,381	4	40,148	44	35,617
Victoria.....	122	61,975	24	27,361	39	10,218
Total.....	1,554	826,341	98	153,972	474	108,314

Division.	Number of Ves- sels subject to Inspection when in Commission.		Number of Ves- sels added to the Dominion register.		Number of Ves- sels lost, broken up or destroyed	
	202	111,358	11	15,605	6	2,622
Halifax.....	154	68,725	5	1,542	3	197
St. John, N.B.....	111	29,896	1	115	1	17
Quebec.....	124	52,855	8	8,175	3	560
Sorel.....	250	91,133	7	27,870	7	5,832
Montreal.....	146	53,241	4	3,121	8	1,945
Kingston.....	391	304,942	19	30,460	22	5,984
Toronto.....	95	35,068	8	10,013	2	357
Collingwood.....	138	40,411	8	11,868	4	435
Port Arthur.....	71	9,298	1	113	6	872
Edmonton.....	259	192,146	14	33,344	1	1,468
Vancouver.....	185	99,555	3	1,043	7	1,202
Victoria.....						
Total.....	2,126	1,088,628	89	143,268	70	21,491

**Seamen Shipped and Discharged.**—Table 54 shows, for each year from 1908 to 1920, the number of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S. 1906, c. 113, ss. 141-143).

## 54.—Number of Seamen Shipped and Discharged at Canadian Ports, calendar years 1908-1920.

Year.	Seamen Shipped.	Seamen Discharged.	Year.		Seamen Shipped.	Seamen Discharged.
1908.....	18,013	11,542	1914.....	18,987	14,989	
1909.....	20,502	11,573	1915.....	22,797	14,319	
1910.....	16,735	11,069	1916.....	20,902	16,689	
1911.....	13,748	11,301	1917.....	16,998	14,145	
1912.....	13,708	11,290	1918.....	16,516	12,930	
1913.....	16,975	13,749	1919.....	18,208	13,649	
			1920.....	22,569	19,719	

**Wrecks and Casualties.**—The statement in Table 55, supplied by the Department of Marine, applies to vessels of every nationality in respect of wrecks and casualties in Canadian waters and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.

**55.—Canadian Wrecks and Casualties for 1870-1900, for the years ended June 30, 1901-1917, and for the calendar years 1918-1920.**

Year.	Casualties.	Net tonnage.	Lives lost.	Stated damages.	Year.	Casualties.	Net tonnage.	Lives lost.	Stated damages.
	No.	Tons.	No.	\$		No.	Tons.	No.	\$
1870-1900.....	9,670	3,577,367	5,096	61,525,760	1912.....	293	269,569	59	1,053,768
1901.....	136	47,181	126	285,782	1913.....	275	270,905	160	1,963,870
1902.....	222	105,814	132	835,916	1914.....	255	210,368	1,083 <sup>1</sup>	4,983,775
1903.....	237	162,297	32	409,991	1915.....	280	214,036	70	1,459,012
1904.....	192	81,143	9	489,699	1916.....	308	242,996	67	1,377,442
1905.....	178	79,588	15	621,267	1917.....	239	715,384	152	4,850,145 <sup>2</sup>
1906.....	220	139,586	149	573,420	1918 <sup>3</sup> .....	226	312,928	402 <sup>3</sup>	1,818,895
1907.....	317	131,441	55	672,466	1919 <sup>4</sup> .....	240	205,720	100	1,808,690
1908.....	307	120,269	34	1,390,891	1920 <sup>4</sup> .....	227	222,928	28	1,643,825
1909.....	343	189,906	24	1,131,966					
1910.....	321	211,565	101	1,569,580					
1911.....	271	122,619	48	942,093	<b>Totals.....</b>	<b>14,757</b>	<b>7,633,610</b>	<b>7,942</b>	<b>91,408,253</b>

NOTE.—For the years 1870-1900, see Canada Year Book, 1911, p. 381.

<sup>1</sup>Includes 1,042 lives lost in the "Empress of Ireland" disaster. <sup>2</sup>Excluding damage to cargo estimated at \$4,310,350. <sup>3</sup>Includes 328 lives lost in the "Princess Sophia" disaster. <sup>4</sup>Calendar years.

**56.—Comparative Statement of Marine Danger Signals, fiscal years 1911-1921.**

Description.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Light stations.....	952	—	—	—	—	—	—	—	—	—	—
Lights.....	1,291	1,452	1,393	1,461	1,521	1,555	1,560	1,575	1,577	1,578	1,598
Light ships.....	13	12	12	12	12	12	12	9	9	10	9
Light boats.....	1	1	1	1	1	1	1	1	1	1	—
Light keepers.....	976	975	1,020	1,040	1,066	1,099	1,126	1,128	1,122	1,120	1,130
Fog whistles.....	14	13	14	13	11	11	11	11	10	9	8
Sirens.....	2	2	2	2	2	2	2	2	2	1	1
Diaphones.....	82	83	89	98	105	110	113	124	128	131	134
Fog bells.....	23	29	26	26	29	31	32	30	29	32	33
Hand fog horns.....	129	137	145	150	148	151	156	154	156	149	148
Hand fog bells.....	3	2	3	3	3	3	3	5	5	4	4
Gas and whistling buoys.....	260	281	299	319	336	327	330	334	339	336	343
Whistling buoys.....	28	27	29	30	31	31	32	32	31	31	30
Bell buoys.....	55	65	71	82	86	89	87	87	86	89	90
Submarine bells.....	10	10	10	13	21	22	22	18	15	12	11
Fog guns and bombs.....	8	9	9	9	9	8	8	8	6	7	7
Fog horns.....	12	14	11	12	10	7	5	3	3	1	1
Fog alarm stations.....	9	9	12	11	12	13	13	13	12	13	12

NOTE.—Besides the foregoing, in 1921 there were 49 lighted spar-buoys, floats and dolphins, 5,018 lighted buoys and 548 unlighted dolphins, spindles and beacons.

**57.—Revenue of the Department of Marine, fiscal years 1916-1921.**

Heads of Revenue.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$
harbours, piers and wharves.....	57,829	86,110	95,259	76,760	71,210	106,047
earnings of Dominion steamers.....	35,071	22,802	9,581	13,621	13,181	4,051
decayed pilots' fund.....	5,669	5,230	5,316	5,605	5,304	7,281
steamboat inspection fund.....	3,677	2,618	1,589	1,486	3,049	73,306
steamboat engineers' fees.....	1,415	1,419	1,204	1,288	1,545	—
dock mariners' fund.....	72,546	76,994	63,636	69,244	3,863	—
navigation, masters and mates.....	4,828	4,600	4,486	3,274	46,314	4,232
usual revenue, sundries.....	279,678	373,314	46,225	224,547	112,965	123,895
John pilotage dues.....	—	—	—	—	—	25,892
Halifax pilotage dues.....	—	—	—	—	—	47,447
Halifax pilots' general account.....	—	—	—	—	4,261	—
Halifax pilots' pension fund.....	—	—	—	—	4,664	1,527
British Columbia, pilotage revenue.....	—	—	—	—	34,521	—
miscellaneous.....	744	1,411	1,516	954	2,125	2,939
<b>Total revenue.....</b>	<b>461,457</b>	<b>574,498</b>	<b>228,812</b>	<b>396,779</b>	<b>303,002</b>	<b>396,617</b>



## 58.—Expenditure of the Department of Marine, fiscal years 1916-1921.

Heads of Expenditure.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$
<b>Ocean and River Service—</b>						
Boilers for SS. "Montcalm" .....	—	—	—	—	37,750	—
Life-saving service .....	—	—	—	—	—	59,685
Motor patrol in B.C. ....	—	—	—	—	—	69,121
Repairing the "Arcturion" .....	—	—	—	—	—	76,217
Dominion steamers and icebreakers .....	1,124,708	1,055,251	1,108,539	1,186,871	1,447,842	1,799,421
Two steamers for Maritime Provinces .....	—	37,599	42,500	192,650	—	—
Wrecking plants subsidy .....	45,000	—	—	35,000	35,000	35,000
Other items of expenditure .....	44,210	33,042	41,635	33,822	37,910	42,171
<b>Total .....</b>	<b>1,213,918</b>	<b>1,195,793</b>	<b>1,192,674</b>	<b>1,364,819</b>	<b>1,558,502</b>	<b>2,081,615</b>
<b>Lighthouse and Coast Service—</b>						
Agencies, rent and contingencies .....	143,881	150,487	165,967	171,270	177,146	188,475
Administration of pilotage .....	41,589	44,466	52,098	71,177	153,913	129,049
Salaries and allowance to light-keepers .....	449,961	462,407	464,091	519,103	599,979	644,768
Maintenance and repairs to light-houses, etc. ....	604,625	652,591	700,707	668,050	751,953	786,389
Construction of lighthouses, etc. ....	364,065	381,222	357,543	349,291	357,853	398,146
Breaking of ice .....	89,600	94,150	25,141	59,515	40,000	40,000
New steamer for St. Lawrence .....	14,377	—	—	—	—	—
Signal service .....	57,848	51,859	53,254	54,236	59,840	68,735
Other items of expenditure .....	30,222	42,187	41,528	18,795	29,321	16,365
<b>Total .....</b>	<b>1,937,759</b>	<b>1,769,289</b>	<b>1,860,309</b>	<b>1,911,247</b>	<b>2,120,005</b>	<b>2,263,113</b>
<b>Public Works, chargeable to Capital—</b>						
Ship Channel, River St. Lawrence .....	981,761	1,084,770	656,422	425,333	484,186	507,212
Dredging plant, River St. Lawrence, Montreal to Father Point .....	767,078	261,221	94,537	70,913	65,964	—
Shipbuilding .....	—	—	—	—	33,014,390	19,994,514
New steamers for River St. Lawrence .....	188,251	—	—	—	—	—
Award, Estate D. J. McCarthy .....	—	—	—	—	3,228	—
Allowance to Mrs. I. Pinard .....	—	1,000	—	—	—	—
Six salt water tugs .....	—	—	—	46,528	—	—
New icebreaker .....	—	—	—	—	—	972
Sorel Shipyard .....	—	—	—	—	—	100,414
<b>Total .....</b>	<b>1,937,090</b>	<b>1,346,991</b>	<b>750,959</b>	<b>542,774</b>	<b>33,567,768</b>	<b>20,603,112</b>
<b>Scientific Institutions—</b>						
Meteorological Service—						
<b>Total .....</b>	<b>172,390</b>	<b>193,896</b>	<b>193,237</b>	<b>188,188</b>	<b>200,734</b>	<b>208,592</b>
<b>Compassionate allowance to dependants of SS. "Simcoe" .....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>61,500</b>	<b>—</b>	<b>—</b>
Honorarium to J. T. Rowan .....	—	—	—	350	—	—
Marine hospitals, etc. ....	66,741	66,818	53,169	74,291	48,562	—
Steamboat inspection .....	64,884	67,560	70,381	72,874	82,633	97,704
Departmental salaries .....	295,496	194,778	211,148	212,390	222,399	231,810
Contingencies .....	23,333	23,669	29,621	30,702	36,140	38,671
Bonus .....	—	—	—	—	461,512	234,448
Gratuities .....	—	—	—	—	2,825	3,264
Steel purchase .....	—	—	—	—	—	189,720
Classification arrears .....	—	—	—	—	—	65,995
Retirement Act .....	—	—	—	—	—	850
<b>Total expenditure .....</b>	<b>5,621,611</b>	<b>4,768,784</b>	<b>4,361,498</b>	<b>4,459,165</b>	<b>38,301,080</b>	<b>26,038,902</b>

**59.—Total Revenue and Expenditure of the Department of Marine, fiscal years  
1868-1921.**

Year.	Revenue.	Expenditure.	Year.	Revenue.	Expenditure.	Year.	Revenue.	Expenditure.
	\$	\$		\$	\$		\$	\$
1868.....	71,811	371,071	1886.....	91,885	980,121	1904.....	128,507	2,150,940
1869.....	75,351	360,900	1887.....	102,238	917,557	1905.....	121,815	4,747,723
1870.....	71,490	367,189	1888.....	99,920	883,251	1906.....	139,475	5,066,253
1871.....	70,254	389,537	1889.....	99,940	1,023,801	1907.....	106,260	3,637,600
1872.....	79,324	518,958	1890.....	115,507	807,417	1908.....	177,591	5,374,774
1873.....	114,756	706,818	1891.....	104,248	885,410	1909.....	169,502	5,498,531
1874.....	108,350	845,151	1892.....	106,582	861,427	1910.....	156,957	4,692,771
1875.....	91,235	844,586	1893.....	107,390	898,720	1911.....	154,492	4,197,420
1876.....	107,984	970,146	1894.....	165,870	905,654	1912.....	185,579	4,911,141
1877.....	105,907	820,054	1895.....	99,557	895,828	1913.....	185,725	5,213,223
1878.....	100,850	786,156	1896.....	103,012	793,634	1914.....	217,034	5,828,027
1879.....	84,144	755,359	1897.....	111,009	867,773	1915.....	795,550 <sup>2</sup>	6,202,908
1880.....	91,942	723,391	1898.....	120,602	856,192	1916.....	461,457	5,621,611
1881.....	108,304	761,731	1899.....	126,528	1,102,602	1917.....	574,498	4,768,784
1882.....	109,125	774,832	1900.....	130,229	982,562	1918.....	228,812	4,361,498
1883.....	104,383	825,011	1901.....	144,919	1,029,925	1919.....	396,779	4,450,165
1884.....	118,080	927,242	1902.....	148,607	1,501,619	1920.....	303,002	38,301,080
1885.....	101,268	1,129,901	1903.....	139,876	1,671,495	1921.....	396,617	26,038,902

<sup>1</sup>Nine months.<sup>2</sup>Includes \$493,000 sale of steamer "Earl Grey", sold to Russian Government.

**TELEGRAPHS.**

Canada's first telegraph line was erected in 1847 between Toronto, Hamilton, St. Catharines and Niagara. In the same year the Montreal Telegraph Co. was organized, and a line built from Quebec to Montreal and Toronto. At the close of the year, the Montreal Telegraph Co., having absorbed the original one, had 540 miles of wire in use, 9 offices, 35 employees, and had sent out 33,000 messages. Equipment of very high quality was used by the early companies.

Development of new companies was rapid, new lines radiating from Montreal in all directions. The Grand Trunk Telegraph Co., with a line from Quebec to Buffalo, offered considerable opposition to the Montreal Co., and soon a combination of the two with the Great North Western Telegraph Co. was formed. This company controlled telegraph service in Canada until the building of the C.P.R. While private companies extended their service to meet the requirements of the more densely populated areas of the country, the Canadian Government built and operated lines in many other districts, 2,548 miles of wire being under government control in 1897. The Government lines existing prior to the taking over of the Canadian National and the Great North Western and the Grand Trunk Pacific Telegraph service were constructed largely for the purpose of supplying telegraphic service to outlying communities. On March 31, 1921, their system comprised 11,205½ miles of pole line, 13,645 miles of wire and 354½ miles of cables. They had 1,248 offices and in the fiscal year 1921 dispatched 636,471 messages as compared with 584,346 in 1920.

**Telegraph Systems.**—The Canadian telegraph system is composed of lines owned by the Dominion Government and by chartered railway and telegraph companies. The Government system includes, besides the lines originally constructed by the Government, those previously owned by the Great North Western Telegraph Co., the Grand Trunk Pacific Telegraph Co., the Canadian Northern Railway Co., and the National Transcontinental Railway. The system is now operated by the Great North Western Telegraph Co., under the name Canadian National Telegraph Co.

The Canadian system, in proportion to population, is one of the most extensive in the world, and is maintained despite many considerable climatic and geographic disadvantages. In the operation of railways, the receipt and despatch of market reports and its usefulness to the press, its services to the nation are invaluable.

**Submarine Cables.**—Six transoceanic cables have a terminus in Canada—five of them on the Atlantic and one on the Pacific coast. The first date on which the cable was shown to be of commercial value was in 1866, and up to the present their use has greatly increased. The Atlantic cables are controlled by English and American interests. The Pacific cable, from Canada to Australia and New Zealand, has been in operation since 1902 and is owned by a partnership of the Governments of Great Britain, New Zealand, Australia and Canada.

**Marconi Wireless.**—Since the first transatlantic wireless message in 1901 and the organization in Canada of the Marconi Wireless Telegraph Co. in 1903, communication has been established between many stations throughout the country and with the outside world. Plans are at present under way for a wireless route which will encircle the world by means of stations in Canada and other parts of the Empire.

**60.—Summary Statistics of all Canadian Telegraphs, for calendar years 1919 and 1920.**

Items.	Year Ended Dec. 31.	
	1919.	1920.
Gross Revenue.....	\$ 9,499,358	11,337,428
Operating Expenses.....	\$ 7,813,259	9,589,982
Net Operating Revenue.....	\$ 1,686,099	1,747,446
Pole Line Mileage.....	Miles 51,415	52,393
Wire Mileage.....	" 214,629	238,866
Employees.....	No. 7,606	7,508
Number of Offices.....	" 4,536	4,825
Messages, Land.....	" 14,200,346	15,589,711
Cablegrams.....	" 934,875	1,162,204
Amount of Money transferred.....	\$ 895,181	7,045,661

61.—Telegraph Statistics of Chartered Companies, June 30, 1911-1919, and for the calendar years 1919 and 1920.

Companies.	Year.	Miles of line.	Miles of wire.	Number of messages. <sup>a</sup>	Number of offices.
Canadian National Telegraph Co. .... (formerly Great Northwestern Telegraph Co.)	1911	10,726	50,568	3,812,159	1,194
	1912 <sup>1</sup>	9,582	46,311	4,400,443	1,175
	1913	9,582	30,134	4,559,972	993
	1914	9,563	30,134	4,756,322	993
	1915 <sup>2</sup>	16,337	50,342	4,627,530	1,335
	1916 <sup>2</sup>	17,696	53,881	5,580,956	1,393
	1917 <sup>2</sup>	No info	ration available.		
	1918 <sup>2</sup>	16,521	49,893	5,655,830	1,416
	1919 <sup>2</sup>	16,521	49,893	5,768,216	1,518
	1919 <sup>2</sup>	18,420	56,481	6,400,476	1,522
	1920 <sup>2</sup>	19,687	72,126	7,340,585	1,576
Canadian Pacific Railway Co. ....	1911	12,866	87,703	3,921,477 <sup>a</sup>	1,424
	1912	13,182	96,296 <sup>4</sup>	4,642,820 <sup>3</sup>	1,524
	1913	13,824	102,857	4,831,119 <sup>3</sup>	1,532
	1914	14,561	105,780	4,225,000 <sup>3</sup>	1,520
	1915	14,633	106,066	3,965,142 <sup>3</sup>	1,564
	1916	14,617	106,143	4,914,519 <sup>3</sup>	1,663
	1917	14,649	111,867	5,283,764 <sup>3</sup>	1,640
	1918	14,559	112,242	5,351,022 <sup>3</sup>	1,600
	1919	14,395	109,153	5,389,074 <sup>3</sup>	1,523
	1919	15,061	114,796	5,764,834 <sup>3</sup>	1,582
	1920	14,412	121,002	6,290,074 <sup>3</sup>	1,587
Western Union. ....	1911	2,598	11,599	572,081	219
	1912	2,576	11,674	618,214	216
	1913	2,278	12,504	621,423	235
	1914	2,832	17,463	694,447	235
	1915	2,819	17,130	677,976	235
	1916	3,082	18,106	647,445	241
	1917	3,087	17,666	722,633	238
	1918	2,866	15,712	689,281	225
	1919	3,660	15,000	758,682	225
	1919	3,631	15,103	801,709	225
	1920	3,638	16,789	757,067	225
Timiskaming and Northern Ontario Railway. ....	1911	294	2,299	211,920	25
	1912	300	2,670	167,326	26
	1913	343	1,407	147,634	27
	1914	343	1,407	136,258	27
	1915	332	1,413	120,170	28
	1916	332	1,670	111,225	28
	1917	339	1,684	123,787	28
	1918	339	1,684	114,907	29
	1919	330	1,675	119,086	29
	1919	330	1,675	130,585	30
	1920	330	1,694	142,538	29
Algoma Central Railway <sup>5</sup> .....	1911	214	517	4,497	6
	1912	378	700	—	7
	1913	314	413	—	8
	1914	424	799	—	8
	1915	424	799	—	8
	1916	424	799	—	8
	1917	424	799	—	8
	1918	424	799	—	8
	1919	424	801	—	8
	1919	424	801	—	8
	1920	334	729	—	8
Algoma Eastern Railway <sup>5</sup> .....	1913	85	89	—	3
	1914	85	89	—	4
	1915	85	171	—	4
	1916	85	171	—	4
	1917	85	171	—	4
	1918	85	171	—	4
	1919	85	171	—	4
	1919	85	171	—	4
	1919	85	171	—	4
	1920	87	174	—	4

<sup>1</sup>This Company leased its property and plant in New York State to the Western Union Co., which accounts for the reduction in the figures of 1912.

<sup>2</sup>Including the Canadian Northern Railway Co.

<sup>3</sup>Not including press messages.

<sup>4</sup>Including 962 miles of cables.

<sup>5</sup>These are telephone lines, and are used for both despatching and commercial business.

<sup>6</sup>Cablegrams not included.



61.—Telegraph Statistics of Chartered Companies, June 30, 1911-1919, and for the calendar years 1919 and 1920—concluded.

Companies.	Year.	Miles of line.	Miles of wire.	Number of messages. <sup>1</sup>	Number of offices.
Grand Trunk Pacific Telegraph Co.....	1911	1,963	6,004	101,048	92
	1912	2,310	8,780	133,677	112
	1913	2,948	10,728	155,027	120
	1914	3,185	14,894	146,689	134
	1915	4,639	13,229	182,003	213
	1916	5,190	20,052	218,606	233
	1917	5,179	20,050	252,577	279
	1918	5,273	22,005	251,532	279
	1919 <sup>2</sup>	2,820	14,296	307,537	187
	1919 <sup>2</sup>	2,817	14,306	307,537	187
	1920 <sup>2</sup>	2,817	14,204	281,428	152
The North American Telegraph Co. Ltd.....	1911	44	783	40,508	62
	1912	44	783	46,999	61
	1913	44	783	49,308	61
	1914	44	783	43,180	59
	1915	44	664	45,451	54
	1916	44	664	53,340	50
	1917	44	664	58,802	46
	1918	44	664	57,439	46
	1919	44	664	112,322	38
	1919	44	547	113,046	24
	1920	44	547	105,233	24
Canadian Northern Railway Co.....	1911	4,367	13,073	—	227
	1912	5,232	15,195	—	—
	1913	5,457	17,209	1,120,676	352
	1914	5,924	18,233	1,040,846	373
Included in G. N.W. (no Canadian National)					
National Transcontinental Railway <sup>3</sup> ..... (Now Canadian National).	1911	313	—	—	—
	1912	1,171	—	—	—
	1913	1,429	—	—	—
	1914	1,798	—	—	—
	1915	1,990	4,834	—	—
	1916	2,003	5,089	—	—
	1917	2,009	4,581 <sup>4</sup>	—	—
	1918	2,009	6,483	—	—

<sup>1</sup>Cablegrams not included.

<sup>2</sup>Statistics of lines in Ontario, Quebec and New Brunswick not included.

<sup>3</sup>Number of messages and offices included in returns from the Grand Trunk Pacific Telegraph Company.

<sup>4</sup>The decrease in wire mileage is due to the elimination of over 500 miles of metallic train despatching telephone circuits which are not used for the transmission of commercial messages.

**Wireless Telegraph Coast Stations.**—Table 62 shows the name, situation and range in nautical miles of the radiotelegraph or wireless telegraph coast stations, as operated by the Department of the Naval Service, and Table 64 the number of messages and words handled and the cost of maintenance for the stations of the east and west coasts and of the Great Lakes. For the year 1920-21 the total number of messages was 414,943, as compared with 341,333 in 1919-20 and of words handled 7,234,213, as compared with 6,128,990 in 1919-20. Table 63 gives the names of the Canadian Government steamers that are equipped with radiotelegraphic apparatus, with the range of miles for each steamer. A transatlantic wireless service is carried on by the Glace Bay, N.S., and Newcastle, N.B., Stations, which work with Clifden and Ballybunion, Ireland, respectively. A commercial wireless service is maintained via the Glace Bay Station, the charge being 18 cents per word as against 25 cents by cable. A commercial wireless service is maintained with Bermuda, via the Canadian Government wireless station at Barrington Passage, N.S., the rate charged per word being 28 cents as against 42 cents by cable.

62.—Coast Stations for Communication by Wireless Telegraphy with Ships at Sea,  
fiscal year 1920-21.

Name of Station.	Situation.	Range in nautical miles.
EAST COAST		
Barrington Passage.....	Nova Scotia.....	1,500
Belle Isle, Nfld.....	Belle Isle Straits.....	250
Point Armour, Nfld.....	Belle Isle Straits.....	150
Harrington, Que.....	Gulf of St. Lawrence.....	150
St. John, N.B.....	Red Head, N.B.....	250
Cape Race, Nfld.....	North Atlantic.....	400
Grindstone Island, Que.....	Gulf of St. Lawrence (Magdalen Island).....	200
Fame Point, Que.....	Gulf of St. Lawrence.....	250
Clark City, Que.....	Gulf of St. Lawrence.....	250
Father Point, Que.....	St. Lawrence River.....	250
Grosse Isle, Que.....	St. Lawrence River.....	100
Quebec, Que.....	St. Lawrence River.....	150
Montreal, Que.....	St. Lawrence River.....	200
Cape Sable, N.S.....	North Atlantic.....	250
Cape Bear, P.E.I.....	Northumberland Strait.....	150
North Sydney, C.B.....	North Sydney, C.B.....	100
Camperdown, N.S.....	Entrance to Halifax Harbour.....	250
Sable Island, N.S.....	North Atlantic.....	300
Halifax, N.S.....	Halifax Dockyard.....	100
Lurcher Lightship.....	Lurcher Shoal.....	100
Direction Finding Stations.		
Canso D/F.....	Nova Scotia.....	150
Cape Race D/F.....	Newfoundland.....	250
Chebuco D/F.....	Nova Scotia.....	150
St. John D/F.....	New Brunswick.....	150
GREAT LAKES.		
Port Arthur, Ont.....	Port Arthur, Ont.....	350
Sault Ste. Marie, Ont.....	Sault Ste. Marie, Ont.....	350
Tobermory, Ont.....	Entrance Georgian Bay, Ont.....	350
Midland, Ont.....	Georgian Bay, Ont.....	350
Point Edward, Ont.....	Lake Huron.....	350
Port Burwell, Ont.....	Lake Erie.....	350
Toronto, Ont.....	Toronto Island, Ont.....	350
Kingston, Ont.....	Barriefield Common.....	350
WEST COAST.		
Gonzales Hill, B.C. (Victoria).....	Victoria, B.C.....	250
Point Grey, Vancouver, B.C.....	Entrance Vancouver Harbour.....	150
Cape Lazo, B.C.....	Strait of Georgia, near Comox, B.C.....	350
Estevan Point, B.C.....	West Coast Vancouver Island, B.C.....	500
Dead Tree Point, B.C.....	South of Graham Island, Q.C.I.....	200
Digby Island, B.C., Prince Rupert.....	Digby Island, Entrance Prince Rupert Harbour.....	250
Alert Bay, B.C.....	Cormorant Island, B.C.....	350
Bull Harbour, B.C.....	Hope Island, Vancouver Isd., B.C.....	350
HUDSON BAY.		
Port Nelson.....	Hudson Bay.....	750
Pas, Man.....	For communication with Port Nelson only.....	750
LICENSED COMMERCIAL STATIONS.		
Public Commercial.		
Glace Bay, C.B.....	Near Glace Bay, C.B.... (Transatlantic).....	3,000
Newcastle, N.B.....	New Brunswick.....	2,500
Louisburg, C.B.....	Cape Breton..... (Transatlantic).....	Recep- tion only
Glace Bay, C.B.....	Cape Breton (Press Service to ships subscribing to this service).....	700

**62.—Coast Stations for Communication by Wireless Telegraphy with Ships at Sea, fiscal year 1920-21—concluded.**

Name of Station.	Situation.	Range in nautical miles.
<b>Private Commercial.</b>		
Granby Bay.....	Granby Bay, B.C.....	100
Kingcome Inlet, B.C.....	Kingcome Inlet, B.C.....	100
Thetford Mines.....	Thetford Mines, Que.....	200
Shawinigan Falls.....	Shawinigan Falls, Que.....	200
Maisonneuve.....	Montreal, Que.....	200
Swanson Bay.....	Swanson Bay, B.C.....	150
Ocean Falls.....	Cousins Inlet, B.C.....	150
Buckley Bay.....	Masset Inlet, B.C.....	100
Thurston Harbour.....	Thurston Harbour, B.C.....	100
Port Alice.....	Quatsino Sound, B.C.....	100
Margaret Bay.....	Smith Inlet, B.C.....	100
Iroquois Falls.....	Iroquois Falls, Ont.....	20
Twin Falls.....	Twin Falls, Ont.....	20
Victoriaville.....	Victoriaville, Que.....	200
Quebec.....	Quebec City.....	200
Anyox.....	Anyox, B.C.....	100
Buckley Bay.....	Buckley Bay, Q. C. I.....	100
Hamilton.....	Hamilton, Ont.....	50
Toronto.....	Toronto, Ont.....	50
Thurston Bay.....	Thurston Bay, B.C.....	100
Myrtle Pt.....	Myrtle Pt., B.C.....	100

**63.—Canadian Government Steamers Equipped with the Radiotelegraph, fiscal year 1920-21.**

Name.	Range.	Name.	Range.
	Miles		Miles
Aberdeen.....	100	Aranmore.....	150
Acadia.....	200	Bellechasse.....	150
Arleux.....	100	Laurentian.....	150
Armentières.....	100	Loos.....	100
Arras.....	100	Malaspina.....	200
Bayfield.....	100	Margaret.....	200
Cartier.....	100	Montcalm.....	150
Dollard.....	150	Newington.....	100
Druid.....	100	St. Eloi.....	100
Estevan.....	200	P. E. Island.....	100
Givenchy.....	100	St. Julien.....	100
Gulnare.....	100	Sheba.....	200
Hochelaga.....	100	Stadacona.....	150
J. A. McKee.....	150	Stanley.....	150
Lady Grey.....	100	Thiepval.....	100
Lady Laurier.....	150	Thos. J. Drummond.....	150

**64.—Business and Cost of Maintenance of Radiotelegraph Stations for the fiscal years 1919-20 and 1920-1921.**

Stations.	1919-20.			1920-21.		
	Messages handled.	Words handled.	Cost of maintenance.	Messages handled.	Words handled.	Cost of maintenance.
	No.	No.	\$	No.	No.	\$
East Coast.....	147,208	2,860,821	62,908	205,413	3,766,863	60,622
Great Lakes.....	20,157	370,021	28,258	24,339	398,234	29,231
West Coast.....	173,968	2,898,148	57,340	185,191	3,069,116	70,811
Hudson Bay <sup>2</sup> .....	1	1	1	2	2	2
<b>Totals.....</b>	<b>341,333</b>	<b>6,128,990</b>	<b>148,506</b>	<b>414,943</b>	<b>7,234,213</b>	<b>160,664</b>

<sup>1</sup>Borne by Department of Railways and Canals. <sup>2</sup>Hudson Bay stations not in operation in 1920-1921.

**TELEPHONES.**

Telephone development in Canada dates from the year 1880, when the Bell Telephone Co. was incorporated by Act of Parliament. Although at this time all patents and lines were owned by the Canadian Telephone Co., they were dependent on the Bell Co., to which they sold out in 1882. By 1883 the first submarine telephone cable had been laid between Windsor and Detroit, and during the year the Bell Co. operated in Canada 4,400 rental earning telephones, 44 exchanges and 40 agencies, with 600 miles of long distance wire. It controlled development in all the provinces except British Columbia, where the greater part of the system has always been in the hands of the British Columbia Telephone Co., Ltd.

With rapid growth of private companies in the Maritime provinces the lines of the Bell Co. were disposed of in 1888, to the Maritime Telegraph and Telephone Co. in Nova Scotia, and to the New Brunswick Telephone Co. in New Brunswick, an interest in these corporations being retained under the terms of sale. A development of a different kind is seen in the three prairie provinces, where well organized systems were sold to the governments of Manitoba and Alberta in 1908 and to Saskatchewan in 1909. The lines in Ontario and Quebec are still largely owned by the Bell Telephone Co.

**Telephone Systems.**—In all the provinces, besides the large telephone companies, are many smaller systems, both urban and rural, usually owned privately or co-operatively. The number of independent lines is particularly large in Saskatchewan. The steady growth in the use of telephones is shown in Table 67, particularly by the increase of 77,508 telephones in 1920 as compared with 1919. For each 100 of population, there were 9.8 telephones in use during 1920, over 40% of the total being in Ontario. In this respect Canada ranks second among the countries for which such data is available.

**Telephone Statistics**—Telephone statistics for 1920, published by the Transportation Branch of the Dominion Bureau of Statistics, show a considerable increase in telephones during the year, especially when the increased rates are considered. These statistics are summarized in the following tables which also give comparative figures for preceding years. The term capitalization as used in Table 65 includes both capital stock and funded debt. Table 66 gives statistics of the number of telephone companies reporting to the Department of Railways and Canals, the remarkable feature being the growth of the number of co-operative companies since 1911. Table 67 furnishes statistics of instruments in use and mileage of wire since 1911, while Table 68 gives financial statistics of Canadian telephone systems since 1912. Interested persons are referred to the Bureau's report on telephone statistics for more detailed information.



**65.—Progress of Telephones in Canada for the years ended June 30, 1916-1919, and for the calendar years 1919 and 1920.**

Items.	June 30.				December 31.	
	1916.	1917.	1918.	1919.	1919.	1920.
	\$	\$	\$	\$	\$	\$
Capitalization.....	76,920,314	79,121,702	85,274,691	91,004,925	100,587,833	116,689,705
Cost.....	88,520,020	94,469,534	104,368,628	113,296,160	125,017,222	144,560,969
Revenue.....	18,594,268	20,122,282	22,753,280	24,600,536	29,401,006	33,473,712
Operating expenses.....	11,147,201	12,095,426	13,644,518	16,167,992	20,081,436	28,044,401
Salaries and wages.....	7,852,719	8,882,593	10,410,807	13,048,055	15,774,586	17,294,405
	No.	No.	No.	No.	No.	No.
Telephone Companies.....	1,592	1,695	2,007	2,047	2,219	2,327
Wire mileage.....	1,600,564	1,708,202	1,736,062	1,822,372	1,956,830	2,105,101
Telephones.....	548,421	604,136	662,330	724,500	778,758	856,266
Employees.....	15,247	16,490	17,336	19,057	20,491	21,187
Persons per telephone.....	14.6	13.4	12.2	12.2	11.3	10.2
Persons per mile of wire.....	5.0	4.7	5.0	4.5	4.5	4.2

**66. —Number of Telephone Companies reporting to the Department of Railways and Canals, by Provinces, December 31, 1920, with totals for the years ended June 30, 1911-19 and Dec. 31, 1919 and 1920.**

Provinces.	Government.	Municipal.	Stock.	Co-operative.	Partnership.	Private.	Total.
1920.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	—	—	1	42	—	—	43
Nova Scotia.....	—	—	17	100	—	1	208
New Brunswick.....	—	—	17	12	—	5	34
Quebec.....	—	—	74	68	1	23	166
Ontario.....	2	75	200	258	8	51	594
Manitoba.....	1	7	3	22	—	2	53
Saskatchewan.....	1	4	317	881	—	—	1,203
Alberta.....	1	1	6	22	—	1	31
British Columbia.....	—	1	11	—	—	—	12
Yukon.....	—	—	1	—	—	—	1
<b>Totals, 1920, Dec. 31.....</b>	<b>5</b>	<b>88</b>	<b>647</b>	<b>1,495</b>	<b>9</b>	<b>83</b>	<b>2,327</b>
<b>Totals, 1919, Dec. 31.....</b>	<b>5</b>	<b>89</b>	<b>666</b>	<b>1,346</b>	<b>18</b>	<b>95</b>	<b>2,219</b>
<b>Totals, 1919, June 30.....</b>	<b>5</b>	<b>82</b>	<b>690</b>	<b>1,163</b>	<b>11</b>	<b>96</b>	<b>2,047</b>
<b>Totals, 1918, ".....</b>	<b>5</b>	<b>74</b>	<b>735</b>	<b>1,085</b>	<b>12</b>	<b>96</b>	<b>2,007</b>
<b>Totals, 1917, ".....</b>	<b>5</b>	<b>73</b>	<b>645</b>	<b>841</b>	<b>17</b>	<b>114</b>	<b>1,695</b>
<b>Totals, 1916, ".....</b>	<b>4</b>	<b>67</b>	<b>622</b>	<b>765</b>	<b>23</b>	<b>111</b>	<b>1,592</b>
<b>Totals, 1915, ".....</b>	<b>4</b>	<b>62</b>	<b>584</b>	<b>601</b>	<b>28</b>	<b>117</b>	<b>1,396</b>
<b>Totals, 1914, ".....</b>	<b>4</b>	<b>58</b>	<b>611</b>	<b>297</b>	<b>48</b>	<b>118</b>	<b>1,136</b>
<b>Totals, 1913, ".....</b>	<b>4</b>	<b>52</b>	<b>543</b>	<b>262</b>	<b>63</b>	<b>151</b>	<b>1,075</b>
<b>Totals, 1912, ".....</b>	<b>3</b>	<b>35</b>	<b>368</b>	<b>133</b>	<b>31</b>	<b>113</b>	<b>683</b>
<b>Totals, 1911, ".....</b>	<b>3</b>	<b>25</b>	<b>308</b>	<b>101</b>	<b>18</b>	<b>82</b>	<b>537</b>

**67.—Telephones in use, mileage of Wire and number of employees, by Provinces, December 31, 1920, with totals for the years ended June 30, 1911-19, and Dec. 31, 1919 and 1920.**

Provinces.	Telephones in use.			Mileage of wire.	Number of employees.
	Central Energy.	Magneto.	Total.		
1920.	No.	No.	No.	Miles.	No.
Prince Edward Island.....	1,893	2,884	4,777	4,906	83
Nova Scotia.....	21,372	12,514	33,886	59,316	944
New Brunswick.....	14,839	11,973	26,812	37,039	705
Quebec.....	99,653	35,877	135,530	379,028	4,337
Ontario.....	213,257	151,541	364,798	789,301	9,232
Manitoba.....	45,574	24,328	69,902	221,747	1,748
Saskatchewan.....	32,900	57,606	90,506	219,591	1,276
Alberta.....	31,119	23,363	54,482	215,870	1,098
British Columbia.....	63,986	11,436	75,422	177,631	1,755
Yukon.....	—	151	151	672	9
<b>Totals, 1920, Dec. 31.....</b>	<b>524,593</b>	<b>331,673</b>	<b>856,266</b>	<b>2,105,101</b>	<b>21,187</b>
<b>Totals, 1919, Dec. 31.....</b>	<b>474,541</b>	<b>304,217</b>	<b>778,758</b>	<b>2,105,240</b>	<b>20,491</b>
<b>Totals, 1919, June 30.....</b>	<b>424,535</b>	<b>299,965</b>	<b>724,500</b>	<b>1,951,562</b>	<b>19,057</b>
<b>Totals, 1918, “.....</b>	<b>384,687</b>	<b>277,643</b>	<b>662,330</b>	<b>1,848,466</b>	<b>17,336</b>
<b>Totals, 1917, “.....</b>	<b>352,770</b>	<b>251,366</b>	<b>604,136</b>	<b>1,708,203</b>	<b>16,490</b>
<b>Totals, 1916, “.....</b>	<b>323,109</b>	<b>225,312</b>	<b>548,421</b>	<b>1,600,564</b>	<b>15,247</b>
<b>Totals, 1915, “.....</b>	<b>313,225</b>	<b>219,865</b>	<b>533,090</b>	<b>1,452,360</b>	<b>15,072</b>
<b>Totals, 1914, “.....</b>	<b>310,166</b>	<b>210,978</b>	<b>521,144</b>	<b>1,343,090</b>	<b>16,799</b>
<b>Totals, 1913, “.....</b>	<b>269,843</b>	<b>193,828</b>	<b>463,671</b>	<b>1,092,587</b>	<b>12,867</b>
<b>Totals, 1912, “.....</b>	<b>212,732</b>	<b>158,152</b>	<b>370,884</b>	<b>889,572</b>	<b>12,783</b>
<b>Totals, 1911, “.....</b>	<b>174,994</b>	<b>127,765</b>	<b>302,759</b>	<b>687,782</b>	<b>10,425</b>

**68.—Capital Liability, Cost, Revenue, and Operating Expenses of Telephones, Dec. 31, 1920, with totals for the years ended June 30, 1912-19, and Dec. 31, 1919 and 1920.**

Provinces.	Capital Stock.	Funded Debt.	Cost of Property and Equipment.	Revenue.	Operating Expenses.	Net Revenue.
1920.	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	164,096	100,000	403,531	95,228	91,073	4,155
Nova Scotia.....	3,200,363	1,500,400	5,094,604	1,473,131	1,253,213	219,918
New Brunswick.....	2,199,555	62,347	2,745,716	913,088	754,389	158,699
Quebec.....	23,946,321	17,281,742	61,954,139	17,753,981	13,599,957	3,854,024
Ontario.....	2,471,730	1,729,104	6,889,412	1,655,133	1,458,740	196,393
Manitoba.....	28,863	16,193,419	16,301,960	2,704,533	3,120,327	— 415,794
Saskatchewan.....	835,355	23,833,584	24,320,563	3,727,003	2,720,205	1,006,798
Alberta.....	42,120	17,365,738	16,675,270	2,266,682	2,163,182	103,500
British Columbia.....	3,196,435	2,473,333	9,981,502	2,864,552	2,565,391	299,161
Yukon.....	65,000	—	194,272	20,381	17,924	2,457
<b>Totals, 1920, Dec. 31.....</b>	<b>36,149,838</b>	<b>80,539,867</b>	<b>144,560,969</b>	<b>33,473,712</b>	<b>28,044,401</b>	<b>5,429,311</b>
<b>Totals, 1919, Dec. 31.....</b>	<b>35,227,233</b>	<b>65,360,600</b>	<b>125,017,222</b>	<b>29,401,006</b>	<b>20,081,436</b>	<b>9,319,570</b>
<b>Totals, 1919, June 30.....</b>	<b>38,482,080</b>	<b>58,522,844</b>	<b>113,296,159</b>	<b>24,600,536</b>	<b>16,167,992</b>	<b>8,432,544</b>
<b>Totals, 1918, “.....</b>	<b>29,803,090</b>	<b>55,471,601</b>	<b>104,368,627</b>	<b>22,753,280</b>	<b>13,644,518</b>	<b>9,108,762</b>
<b>Totals, 1917, “.....</b>	<b>29,476,367</b>	<b>49,645,335</b>	<b>94,469,534</b>	<b>20,122,282</b>	<b>12,095,426</b>	<b>8,026,856</b>
<b>Totals, 1916, “.....</b>	<b>29,416,956</b>	<b>47,503,358</b>	<b>88,520,021</b>	<b>18,594,268</b>	<b>11,147,201</b>	<b>7,447,067</b>
<b>Totals, 1915, “.....</b>	<b>28,947,122</b>	<b>45,337,869</b>	<b>83,792,553</b>	<b>17,601,673</b>	<b>12,836,716</b>	<b>4,764,957</b>
<b>Totals, 1914, “.....</b>	<b>28,644,340</b>	<b>41,647,554</b>	<b>80,258,356</b>	<b>17,297,269</b>	<b>12,882,402</b>	<b>4,414,867</b>
<b>Totals, 1913, “.....</b>	<b>26,590,501</b>	<b>33,256,503</b>	<b>69,214,971</b>	<b>14,897,278</b>	<b>11,175,689</b>	<b>3,721,589</b>
<b>Totals, 1912, “.....</b>	<b>21,533,605</b>	<b>24,743,247</b>	<b>56,887,799</b>	<b>12,273,627</b>	<b>9,094,689</b>	<b>3,178,938</b>

<sup>1</sup>As the head office of the Bell Telephone Company is situated in Montreal, its very large business is necessarily accredited to Quebec, though largely transacted outside of that province.

### THE POST OFFICE.

A postal service was established between Montreal and Quebec as early as 1721, official messengers and other travellers making a practice of carrying letters for private persons. When Canada came under British rule, the Post Office was placed on a settled footing by Benjamin Franklin, then deputy postmaster-general for the American colonies, who visited Canada in 1763, opened post offices at Quebec, Montreal and Three Rivers, and also established courier communication between Montreal and New York. Since 1755 Halifax had had a post office and direct postal communication with Great Britain.

As a consequence of the outbreak of the American Revolution, the first exclusively Canadian postal service, a courier route from Halifax to Quebec, was established, involving a seven weeks' trip and expenses of about £200, of which only one-third was met by postal charges. Up to 1804 the postal facilities of Upper Canada consisted of one regular trip by courier each winter with whatever mail might reach Montreal during the season of navigation. Charges were necessarily high, \$1.12 being paid on ordinary letters from London to Toronto *via* Halifax.

The first post office in Toronto was opened about 1800. By 1816 there were 19 offices in the two Canadas, and in 1827 this number had increased to 114. At this time the system consisted primarily of a trunk line of communication between Halifax, Quebec, Montreal, Toronto, and Amherstburg, over which couriers travelled at varying intervals. Branching off this line were routes to Sorel, Sherbrooke, St. Johns, Hull, Hawkesbury, Perth and Richmond, with most deliveries made once or twice a week.

Hitherto the Post Office had been under the control of the Imperial Department, but considerable agitation resulted in the service being transferred on April 6, 1851, to the several provinces. Only enough mutual control was maintained to ensure the continuance of Imperial and intercolonial relations. The provinces had complete jurisdiction over the establishment and maintenance of systems and rates.

At Confederation the provincial systems were transferred to the Dominion. The Post Office Act of 1867 established a service throughout Canada. The domestic rate on letters was reduced from 5 to 3 cents per half-ounce and in 1870 the rates to the United States and Great Britain were reduced from 10 to 6 cents and from  $12\frac{1}{2}$  to 6 cents respectively per half-ounce. In 1875 a convention between Canada and the United States reduced postal rates between the countries to the domestic level. In 1878, on the admission of Canada to the Postal Union, letter postage to the countries of the Postal Union was reduced to 5 cents per half-ounce. After a conference in 1897 Imperial penny postage (2 cents per half-ounce) was established on Dec. 25, 1898, while the domestic rate was reduced from 3 to 2 cents per ounce. These rates were maintained until 1915, when a 1 cent war tax, still in force, was imposed on all 2 cent letters, on post cards and postal notes. Recently the rate to Great Britain has been increased to 4 cents per ounce and that to the Postal Union has been raised to 10 cents per ounce.

The Post Office Department is administered by the Postmaster-General. Besides the several administrative branches within the Department, the Dominion is divided into 15 districts, each in charge of a Post Office Inspector. The Canadian system embraces a territory more extensive than that served by any other systems except those of the United States and Russia, and must do this with a much smaller population.

**Money Order and Savings Bank Services.**—The auxiliary postal services—the money order service and post office savings bank—have expanded enormously between Confederation and the present time. In 1868 there were 515 Money Order offices in operation, issuing orders to an amount of \$3,342,574. In 1921, these figures had increased to 5,197 and \$173,523,322. The Post Office savings banks were established in 1868, deposits for the first year being \$861,655. In 1921 the 1,328 banks in operation showed deposits for the year of \$6,631,685, and total balance due to depositors of \$31,605,594.

**Rural Mail Delivery.**—A system of rural mail delivery was inaugurated in Canada on October 10, 1908, limited at that time to existing stage routes, persons residing on such routes being entitled to have mail boxes put up in which the mail carrier was to deposit mail matter and from which he was to collect mail matter and carry it to the post office. As a consequence of the public approval of this scheme new regulations, taking effect on April 1, 1912, made all persons residing in rural districts along and contiguous to well defined main thoroughfares of one mile and upwards eligible to receive their mail in this manner, while couriers of rural mail routes were also required to sell postage stamps and take applications for and accept money, money orders and postal notes. The result has been an increase in the number of rural routes from approximately 900 in 1912 to 3,750 in 1921, having 194,790 mail boxes as against approximately 25,000 in 1912. The establishment of these routes has been an important factor in the recent amelioration of the conditions of Canadian rural life.

**Postal Statistics.**—During the fiscal year 1921 there was an increase of 407 miles in the system over which the mails are carried by railway, bringing the total actual track mileage for the carriage of mails on March 31, 1921, to 35,949 miles. The total mileage of mail conveyance by railway was 41,215,804 miles as against 39,355,268 in the previous year, indicating reasonably, rapid expansion in the postal service. Statistics of the number of post offices in operation on March 31, 1921, are given in Table 69, of postal revenue for 1920 and 1921 in Table 70 and of revenue and expenditure of the Post Office Department since 1890 in Table 71. A list of mail subsidies and steamship subventions is given in Table 72. Table 73 is an historic table showing the operation of the money order system from 1901, while Table 74 gives detailed statistics of money orders for recent years. Table 75 deals with the number and value of postal notes in recent years and Table 76 with the issue of postage stamps in the past two fiscal years.



**69.—Number of Post Offices in Operation in the several Provinces of Canada, March 31, 1921.**

Provinces.	Post Offices.			
	In Operation Mar. 31, 1920.	Established during Year.	Closed during Year.	In Operation Mar. 31, 1921.
Prince Edward Island.....	137	—	1	136
Nova Scotia.....	1,845	14	15	1,844
New Brunswick.....	1,145	5	16	1,134
Quebec.....	2,288	28	23	2,293
Ontario.....	2,572	39	29	2,582
Manitoba.....	794	14	10	798
Saskatchewan.....	1,430	21	35	1,416
Alberta.....	1,191	28	32	1,187
British Columbia.....	826	26	18	834
Yukon Territory.....	23	1	1	23
Northwest Territories.....	5	—	—	5
<b>Total.....</b>	<b>12,256</b>	<b>176</b>	<b>180</b>	<b>12,252</b>

**70.—Statistics of Gross Postal Revenue of Offices collecting \$10,000 and upwards, for the fiscal years 1920 and 1921.**

Name of Post Office.	1920.	1921.	Name of Post Office.	1920.	1921.
<b>P. E. Island.</b>			<b>Quebec.</b>		
Charlottetown.....	\$ 56,426	\$ 55,511	Chicoutimi.....	\$ 15,897	\$ 21,288
Summerside.....	19,609	20,655	Coaticook.....	10,916	10,892
<b>Total for Province</b>	<b>149,804</b>	<b>152,403</b>	Granby.....	14,675	15,093
<b>Nova Scotia.</b>			Hull.....	21,824	26,221
Amherst.....	39,182	42,377	Joliette.....	16,785	19,910
Antigonish.....	12,099	14,166	La Tuque.....	11,503	13,702
Bridgewater.....	15,178	15,764	Montreal.....	2,738,298	3,182,947
Dartmouth.....	13,807	14,263	Quebec.....	380,528	424,267
Glouce Bay.....	15,754	17,491	Richmond.....	10,083	10,417
Halifax.....	343,958	396,208	Rimouski.....	9,484	11,926
Kentville.....	17,569	18,759	St. Hyacinthe.....	28,578	31,885
Lunenburg.....	11,335	11,579	St. Johns.....	15,366	18,370
New Glasgow.....	33,217	36,141	St. Lambert (Chambly).....	22,125	1
North Sydney.....	17,084	17,993	Shawinigan Falls.....	20,446	22,960
Pictou.....	13,265	14,271	Sherbrooke.....	85,428	96,955
Sydney.....	60,613	67,623	Sorel.....	11,173	11,309
Sydney Mines.....	9,664	10,344	Thetford Mines.....	12,229	13,588
Truro.....	45,785	51,074	Timiskaming Station.....	5,536	10,074
Windsor.....	17,356	18,145	Three Rivers.....	45,510	51,255
Wolfville.....	11,843	12,456	Valleyfield.....	10,119	11,602
Yarmouth.....	24,700	26,321	Victoriaville.....	12,714	14,263
<b>Total for Province</b>	<b>1,195,204</b>	<b>1,303,666</b>	<b>Total for Province</b>	<b>4,813,338</b>	<b>5,408,224</b>
<b>New Brunswick.</b>			<b>Ontario.</b>		
Bathurst.....	11,852	13,505	Amherstburg.....	8,297	10,417
Campbellton.....	18,224	19,080	Arnprior.....	14,199	14,496
Chatham.....	12,937	13,586	Aurora.....	11,207	11,369
Edmundston.....	9,274	11,390	Aylmer West.....	12,813	13,812
Fredericton.....	58,785	61,663	Barrie.....	25,093	25,112
Moncton.....	105,545	324,358	Belleville.....	48,554	51,839
Newcastle.....	12,893	13,776	Bowmanville.....	12,690	12,632
St. John.....	250,832	267,516	Braacebridge.....	12,670	12,557
St. Stephen.....	17,228	18,043	Brampton.....	21,617	22,221
Sackville.....	12,933	14,893	Brantford.....	120,470	134,049
Sussex.....	14,339	14,845	Bridburg.....	15,941	16,235
Woodstock.....	17,526	18,647	Brockville.....	44,791	48,306
<b>Total for Province</b>	<b>854,155</b>	<b>1,123,007</b>	Campbellford.....	10,617	10,542
			Carleton Place.....	13,424	14,243
			Chatham.....	63,127	67,552
			Cobalt.....	26,261	25,133
			Cobourg.....	21,518	22,019
			Cochrane.....	10,927	13,405

<sup>1</sup>Included in Montreal.

70.—Statistics of Gross Postal Revenue of Offices collecting \$10,000 and upwards, for fiscal years 1920 and 1921—con.

Name of Post Office.	1920.	1921.	Name of Post Office.	1920.	1921.
<b>Ontario—con.</b>	\$	\$	<b>Ontario—concluded</b>	\$	\$
Collingwood.....	23,904	24,052	Tilsonburg.....	14,589	14,414
Cornwall.....	29,682	30,710	Tinminis.....	17,211	17,284
Dundas.....	17,287	17,512	Toronto.....	4,896,480	4,947,777
Dunnville.....	16,152	18,620	Trenton.....	19,199	18,590
Fergus.....	14,657	14,494	Walkerton.....	11,047	11,217
Ford.....	12,742	15,435	Walkerville.....	55,989	56,732
Fort William.....	64,975	68,916	Wallaceburg.....	12,890	13,425
Fort Frances.....	10,674	12,646	Waterloo.....	24,673	26,978
Galt.....	53,940	59,440	Welland.....	44,578	46,202
Gananoque.....	16,141	17,237	Weston.....	14,351	14,800
Georgetown.....	10,057	10,168	Whitby.....	11,642	11,267
Goderich.....	17,442	17,426	Windsor.....	156,426	208,673
Grimsbv.....	11,150	12,373	Wingham.....	10,879	11,853
Guelph.....	93,608	98,523	Woodstock.....	43,801	47,926
Haileybury.....	15,590	16,148			
Hamilton.....	489,571	544,834	<b>Total for Province.....</b>	<b>10,993,258</b>	<b>11,416,685</b>
Hanover.....	13,123	12,612			
Harriston.....	10,148	10,210	<b>Manitoba.</b>		
Hespeler.....	10,948	10,781	Brandon.....	97,207	102,461
Huntsville.....	11,793	12,312	Dauphin.....	22,109	24,539
Ingersoll.....	23,265	24,681	Neepawa.....	11,539	12,228
Iroquois Falls.....	8,338	12,246	Portage la Prairie.....	38,143	39,472
Kenora.....	17,168	20,223	Virden.....	9,687	10,078
Kincairdine.....	9,885	11,165	Winnipeg.....	2,585,451	2,838,805
Kingston.....	120,766	108,255			
Kitchener.....	87,294	29,082	<b>Total for Province.....</b>	<b>3,261,473</b>	<b>3,577,832</b>
Leamington.....	14,099	15,685			
Lindsay.....	29,629	30,545	<b>Saskatchewan.</b>		
Listowel.....	11,746	13,096	Estevan.....	18,092	19,717
London.....	369,378	388,716	Humboldt.....	11,712	12,936
Meaford.....	11,161	11,237	Lloydminster.....	9,930	10,107
Midland.....	20,322	21,101	Maple Creek.....	10,746	12,553
Mount Forest.....	10,137	9,618	Melfort.....	12,987	14,074
Napanee.....	19,353	20,028	Melville.....	10,208	12,533
New Liskeard.....	11,739	12,106	Moosejaw.....	129,957	138,049
Newmarket.....	14,923	16,472	North Battleford.....	24,099	25,965
Niagara Falls.....	75,699	87,289	Prince Albert.....	45,763	47,882
North Bay.....	40,450	42,717	Regina.....	599,195	588,582
Oakville.....	12,705	13,867	Saskatoon.....	229,728	248,511
Orangeville.....	10,728	11,625	Shaunavon.....	9,610	12,360
Orillia.....	41,035	42,107	Swift Current.....	32,986	38,074
Oshawa.....	49,601	53,998	Weyburn.....	30,196	32,494
Ottawa.....	470,141	510,842	Yorkton.....	32,793	37,282
Owen Sound.....	44,974	45,230			
Paris.....	16,658	17,157	<b>Total for Province.....</b>	<b>2,311,457</b>	<b>2,452,275</b>
Parry Sound.....	14,907	14,444			
Pembroke.....	28,319	29,642	<b>Alberta.</b>		
Perth.....	22,519	25,701	Banff.....	11,396	14,634
Peterborough.....	93,089	95,833	Calgary.....	493,445	558,569
Petrolia.....	13,219	13,820	Camrose.....	14,535	15,248
Pictou.....	15,236	15,867	Drumheller.....	12,541	15,713
Port Arthur.....	50,447	51,799	Edmonton.....	367,120	420,466
Port Colborne.....	13,983	14,617	Hanna.....	9,280	10,744
Port Hope.....	19,968	20,362	Lacombe.....	11,769	11,931
Prescott.....	11,274	12,730	Lethbridge.....	59,462	64,661
Preston.....	18,481	20,405	Macleod.....	10,646	11,028
Renfrew.....	26,710	27,249	Medicine Hat.....	49,278	52,954
St. Catharines.....	78,545	85,243	Red Deer.....	17,544	18,022
St. Mary's.....	16,244	16,804	Stettler.....	10,425	11,150
St. Thomas.....	54,803	58,742	Vermilion.....	12,023	11,213
Sandwich.....	11,007	9,522	Vegreville.....	10,053	10,100
Sarnia.....	55,532	61,495	Wetaskiwin.....	14,778	15,721
Sault Ste. Marie.....	69,195	77,894			
Seaforth.....	10,453	10,547	<b>Total for Province.....</b>	<b>1,817,049</b>	<b>2,022,739</b>
Simcoe.....	19,160	19,819			
Smiths Falls.....	25,468	26,251			
Stratford.....	50,165	54,734			
Stratford Station.....	9,120	11,969			
Strathroy.....	11,590	11,609			
Sturgeon Falls.....	8,368	10,529			
Sudbury.....	47,062	50,529			
Thorold.....	11,708	18,460			

**70.—Statistics of Gross Postal Revenue of Offices collecting \$10,000 and upwards, for fiscal years 1920 and 1921—concluded.**

Name of Post Office.	1920.	1921.	Name of Post Office.	1920.	1921.
<b>British Columbia.</b>	\$	\$	<b>Yukon.</b>	\$	\$
Chilliwack.....	13,166	14,831	<b>Total for Yukon.....</b>	<b>10,034</b>	<b>11,702</b>
Cranbrook.....	15,637	17,742			
Duncan Station.....	11,726	14,841			
Fernie.....	15,296	17,948			
Kamloops.....	28,853	32,192			
Kelowna.....	17,288	19,960			
Nanaimo.....	25,629	26,672			
Nelson.....	37,411	40,548			
New Westminster.....	53,520	58,108			
North Vancouver.....	14,535	15,505			
Penticton.....	15,280	19,270			
Prince Rupert.....	32,531	36,120			
Revelstoke.....	11,997	12,816			
Trail.....	11,357	11,424			
Vancouver.....	826,142	919,848			
Vernon.....	26,178	30,260			
Victoria.....	252,451	251,864			
<b>Total for Province.....</b>	<b>1,886,561</b>	<b>2,073,163</b>			

**SUMMARY.**

P.E. Island.....	149,804	152,403
Nova Scotia.....	1,195,204	1,303,666
New Brunswick.....	854,155	1,123,007
Quebec.....	4,813,338	5,408,224
Ontario.....	10,993,258	11,416,685
Manitoba.....	3,261,473	3,577,832
Saskatchewan.....	2,311,457	2,452,275
Alberta.....	1,817,049	2,022,739
British Columbia.....	1,886,561	2,073,163
Yukon.....	10,034	11,702

**Total..... 27,292,333 29,541,696**

**71.—Revenue and Expenditure of the Post Office Department for the quinquennial years 1890-1910, and for the fiscal years 1911-1921.**

Fiscal Years.	Net revenue.	Expenditure.	Deficit.	Surplus.
1890.....	\$ 2,357,389	\$ 3,074,470	\$ 717,081	\$ -
1895.....	2,792,790	3,593,647	800,857	-
1900.....	3,183,984	3,645,646	461,662	-
1905.....	5,125,373	4,634,528	-	490,845
1910.....	7,958,547	7,215,337	-	743,210
1911.....	9,146,952	7,954,223	-	1,192,729
1912.....	10,482,255	9,172,035	-	1,310,220
1913.....	12,060,476	10,882,805	-	1,177,671
1914.....	12,956,216	12,822,058	-	134,158
1915.....	13,046,650	15,961,191	2,914,541	-
1916.....	18,858,410	16,009,139	-	2,849,271
1917.....	20,902,384	16,300,579	-	4,601,805
1918.....	21,345,394	18,046,558	-	3,298,836
1919.....	21,602,713	19,273,584	-	2,329,129
1920.....	24,449,917	20,774,385	-	3,675,532
1921.....	26,331,119	24,661,262	-	1,669,857

NOTE.—For all other years since 1868, see Canada Year Book, 1911, p. 288.

**72.—Mail Subsidies and Steamship Subventions, fiscal years 1919-1921.**

Service.	1919.	1920.	1921.
Canada and the West Indies or South America, or both.....	\$ -	\$ -	\$ 327,564
Canada and Great Britain.....	424,323	229,345	-
Canada and South Africa.....	60,833	133,833	146,000
Canada and Australia or New Zealand or both on Pacific Ocean.....	166,624	124,068	124,642
Canada (Atlantic) and Australia and New Zealand.....	23,333	70,000	140,000
Canada, China and Japan.....	180,992	367,187	-
Canada and Newfoundland.....	56,357	57,587	20,295
Ferry service between Campment, l'Ours island and mainland of Georgian bay.....	-	167	3,000
St. John and Digby.....	20,000	19,391	9,584
St. John, Digby, Annapolis and Granville.....	2,000	2,000	2,000
St. John, N.B., and Minas Basin and Margaretsville, N.S.....	2,250	6,500	3,750
St. John, Westport and Yarmouth.....	10,000	10,000	10,000
St. John, Halifax, West Indies or South America.....	222,743	340,667	-
St. John and Bridgetown.....	2,500	2,500	2,060
Halifax, La Have, and La Have river ports.....	-	-	3,731
Halifax and Sherbrooke.....	1,692	2,000	-
Halifax, Mahone, Tancook Isle, etc.....	1,927	3,000	-
Halifax and Newfoundland.....	8,000	10,000	5,000
Halifax, Canso and Guysboro.....	5,000	5,000	6,596
Halifax and Spry bay and ports in C. Breton.....	4,000	4,000	3,846
Halifax and West Coast of C.B.....	4,000	4,000	4,000

72.—Mail Subsidies and Steamship Subventions, fiscal years 1919-1921—concluded.

Service.	1919.	1920.	1921.
Halifax, south Cape Breton and Bras d'Or lake ports .....	\$ 4,000	\$ 6,000	\$ 6,000
Magdalen islands and mainland .....	18,000	—	—
Grand Manan and mainland .....	10,000	12,500	15,000
Quebec and Gaspé basin .....	8,500	—	—
Quebec and ports on the shores of the Gulf of St. Lawrence and between ports in P.E. Island, Nova Scotia, Newfoundland and Magdalen islands .....	—	63,380	68,906
Pictou and Montague, Murray Harbour, etc., and Georgetown .....	3,580	6,000	6,000
Pictou and New Glasgow and Antigonish County ports and Mulgrave .....	—	1,500	1,500
Pt. Mulgrave and Guysboro .....	5,500	5,204	6,560
Pt. Mulgrave, St. Peter's, etc. ....	8,500	5,980	6,208
Pt. Mulgrave and Canso .....	6,500	9,287	11,500
Pictou, Mulgrave and Cheticamp .....	7,500	7,500	7,500
Petit de Grat and Mulgrave I.C.R. terminus .....	6,208	6,900	8,062
Baddeck and Iona .....	5,825	6,825	6,825
Sydney and Whycocomagh .....	3,000	4,000	4,000
Sydney to Bras d'Or lake ports and ports on east and west coasts of C.B. ....	—	8,421	14,000
Sydney and bay St. Lawrence ports .....	6,000	6,000	9,000
St. Catharines bay and Tadoussac .....	887	—	—
Victoria, Vancouver and Skagway .....	11,263	23,229	23,594
Charlottetown, Victoria and Holiday's Wharf .....	—	2,031	2,500
Victoria and Vancouver island (west coast) .....	4,375	4,375	15,000
Victoria and San Francisco .....	2,481	2,077	2,740
North Shore River St. Lawrence, between Quebec and Harrington .....	28,000	—	—
Newcastle, Neguac and Escuminac, Miramichi river and bay .....	2,500	3,000	3,000
Pelee island and mainland .....	8,000	8,000	8,000
Froude's point and Lockport .....	600	1,000	—
Prince Rupert, B.C., and Queen Charlotte islands .....	21,000	21,000	21,000
Vancouver and ports on Howe sound .....	—	2,240	3,202
St. John and St. Andrews, N.B. ....	4,000	4,000	4,000
Vancouver and northern ports of B.C. ....	16,800	16,800	24,800
Expenses in connection with the supervision of subsidized steamship services .....	2,257	3,512	3,604
<b>Total subsidies and subventions .....</b>	<b>1,391,850</b>	<b>1,632,906</b>	<b>1,094,509</b>

NOTE.—The figures in the above table are taken from the "Canada Public Accounts," as issued by the Finance Department: they represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, including the conveyance of mails.

73.—Operation of the Money Order System in Canada, fiscal years 1901-1921.

Fiscal Years.	Orders issued in Canada.	Value of orders issued in Canada.	Payable in		Value of orders issued in other countries payable in Canada.
			Canada.	Other countries.	
	No.	\$	\$	\$	\$
1901 .....	1,151,024	17,956,258	14,324,289	3,631,969	2,592,845
1902 .....	1,446,129	23,549,402	18,423,035	5,126,367	3,575,803
1903 .....	1,668,705	26,868,202	20,761,078	6,107,124	4,604,528
1904 .....	1,869,233	29,652,811	21,706,474	7,946,337	5,197,122
1905 .....	1,924,130	32,349,476	23,410,485	8,938,991	5,602,257
1906 .....	2,178,549	37,355,673	26,133,565	11,222,108	6,533,201
1907 (9 mos.) .....	1,485,278	32,160,098	21,958,855	10,201,243	5,393,042
1908 .....	2,990,691	49,974,007	31,836,629	18,137,378	7,933,361
1909 .....	3,596,299	52,627,770	36,577,552	16,050,218	7,794,751
1910 .....	4,178,752	60,967,162	41,595,205	19,371,957	8,048,467
1911 .....	4,840,896	70,614,862	45,451,425	25,163,437	8,664,557
1912 .....	5,777,757	84,065,891	52,568,433	31,497,458	8,712,667
1913 .....	6,866,563	101,153,272	61,324,030	39,829,242	9,081,627
1914 .....	7,228,269	109,500,670	66,113,221	43,387,449	9,807,313
1915 .....	6,990,813	89,957,906	64,723,941	25,233,965	9,707,383
1916 .....	7,171,375	94,469,871	75,781,582	18,688,289	9,868,137
1917 .....	8,698,502	119,695,535	97,263,961	22,431,574	9,704,610
1918 .....	9,919,665	142,959,167	116,764,491	26,194,676	9,385,627
1919 .....	9,100,707	142,375,809	116,646,096	25,729,713	10,351,021
1920 .....	9,947,018	159,224,937	135,201,816	24,023,121	10,050,361
1921 .....	11,013,167	173,523,322	155,916,232	17,607,090	6,680,971

NOTE.—For 1868 to 1900, see Canada Year Book, 1911, p. 289.



## 74.—Money Orders by Provinces, fiscal years 1917-1921.

Provinces.	1917.	1918.	1919.	1920.	1921.
Money order offices in—	No.	No.	No.	No.	No.
<b>Canada</b> .....	<b>4,810</b>	<b>4,930</b>	<b>4,953</b>	<b>5,106</b>	<b>5,197</b>
Prince Edward Island.....	45	48	50	53	62
Nova Scotia.....	327	331	333	342	344
New Brunswick.....	211	217	216	232	238
Quebec.....	1,044	1,065	1,069	1,093	1,111
Ontario.....	1,495	1,497	1,483	1,507	1,520
Manitoba.....	319	327	331	340	344
Saskatchewan.....	567	594	615	636	650
Alberta.....	404	440	443	476	490
British Columbia.....	393	406	408	422	433
Yukon Territory.....	5	5	5	5	5
Money orders issued in—	No.	No.	No.	No.	No.
<b>Canada</b> .....	<b>8,698,502</b>	<b>9,919,665</b>	<b>9,100,707</b>	<b>9,947,018</b>	<b>11,013,167</b>
Prince Edward Island.....	40,893	43,806	44,406	52,195	59,098
Nova Scotia.....	506,145	539,671	590,313	652,649	756,168
New Brunswick.....	236,791	264,547	279,021	342,868	428,648
Quebec.....	1,052,738	1,110,542	1,114,461	1,247,392	1,374,724
Ontario.....	2,695,440	3,136,558	2,757,205	3,086,535	3,658,178
Manitoba.....	722,677	867,968	744,702	779,379	815,550
Saskatchewan.....	1,657,826	1,938,431	1,692,030	1,762,494	1,804,663
Alberta.....	1,068,055	1,259,922	1,088,261	1,176,999	1,245,872
British Columbia.....	706,546	748,746	784,115	840,874	865,054
Yukon Territory.....	11,361	9,474	6,193	5,633	5,312
Receipts for money orders issued in—	\$	\$	\$	\$	\$
<b>Canada</b> .....	<b>119,695,535</b>	<b>142,959,168</b>	<b>142,375,809</b>	<b>159,224,937</b>	<b>173,523,322</b>
Prince Edward Island.....	597,404	684,849	711,259	837,384	890,038
Nova Scotia.....	6,780,049	7,877,907	9,376,962	10,326,440	11,241,946
New Brunswick.....	3,485,667	3,996,863	4,494,810	5,679,866	6,725,201
Quebec.....	14,352,704	15,669,298	16,750,568	19,135,849	20,982,946
Ontario.....	32,832,189	40,576,601	40,482,359	47,127,150	54,348,199
Manitoba.....	9,601,765	11,869,796	12,036,194	13,151,959	13,727,900
Saskatchewan.....	26,923,050	31,964,231	27,982,176	28,592,371	29,144,606
Alberta.....	15,295,643	18,399,046	16,338,633	18,532,956	20,173,523
British Columbia.....	9,512,470	11,671,635	14,045,759	15,696,988	16,146,385
Yukon Territory.....	314,594	248,942	157,089	143,974	142,578
Number of money orders paid in—	No.	No.	No.	No.	No.
<b>Canada</b> .....	<b>7,455,696</b>	<b>7,923,732</b>	<b>8,033,665</b>	<b>9,104,136</b>	<b>9,864,184</b>
Prince Edward Island.....	29,952	31,999	35,228	33,787	36,599
Nova Scotia.....	235,466	235,606	247,749	288,529	419,594
New Brunswick.....	147,600	138,946	142,906	207,579	704,071
Quebec.....	894,383	1,232,482	875,334	956,990	1,057,289
Ontario.....	2,891,703	2,595,537	3,238,259	3,775,383	3,551,679
Manitoba.....	1,823,670	1,786,761	1,786,195	1,992,408	1,790,933
Saskatchewan.....	779,872	1,025,124	977,016	1,062,526	929,641
Alberta.....	327,758	355,988	364,033	391,786	971,594
British Columbia.....	323,961	370,261	365,824	394,094	401,910
Yukon Territory.....	1,331	1,028	1,121	1,054	873
Amount of money orders paid in—	\$	\$	\$	\$	\$
<b>Canada</b> .....	<b>105,772,270</b>	<b>125,267,851</b>	<b>127,219,233</b>	<b>146,405,784</b>	<b>162,992,196</b>
Prince Edward Island.....	546,470	617,456	713,725	713,292	800,594
Nova Scotia.....	4,032,907	4,432,929	5,027,434	5,616,039	6,764,328
New Brunswick.....	2,485,838	2,576,597	2,937,008	3,955,777	10,415,372
Quebec.....	12,588,943	16,761,173	14,647,863	17,206,557	22,998,684
Ontario.....	35,747,683	40,013,727	44,029,412	53,250,399	52,562,211
Manitoba.....	25,160,629	31,430,519	29,017,441	32,092,104	31,633,328
Saskatchewan.....	12,483,206	15,399,242	15,228,040	16,668,206	18,303,344
Alberta.....	6,862,799	7,420,506	7,675,350	8,328,840	10,368,069
British Columbia.....	5,826,471	6,587,920	7,914,636	8,543,570	9,128,855
Yukon Territory.....	37,324	27,782	28,324	26,000	17,411

75.—Number and Total Values of Postal Notes, fiscal years 1916-1921.

Value.	1916.	1917.	1918.	1919.	1920.	1921.
\$ cts.	No.	No.	No.	No.	No.	No.
0 20.	235,354	286,587	235,579	191,362	166,078	144,084
0 25.	353,452	328,095	327,138	306,642	275,214	227,789
0 30.	271,804	245,720	229,152	222,590	204,429	175,564
0 40.	252,862	251,056	244,294	228,783	229,954	240,085
0 50.	464,551	444,677	433,142	417,145	409,967	389,935
0 60.	234,171	234,783	233,977	220,299	220,006	226,510
0 70.	125,914	127,929	133,578	124,850	131,031	146,247
0 75.	249,645	248,858	234,081	225,925	188,561	173,389
0 80.	192,601	196,446	198,667	188,117	189,654	196,695
0 90.	202,720	201,414	202,228	185,790	191,881	208,922
1 00.	923,004	958,563	923,891	891,539	851,118	864,275
1 50.	371,291	417,791	426,230	420,503	433,896	467,034
2 00.	564,010	599,418	643,685	725,992	603,156	619,726
2 50.	220,709	263,419	276,419	266,918	277,871	277,796
3 00.	347,682	404,652	424,815	423,243	421,983	452,632
4 00.	216,076	257,961	284,362	276,919	278,762	317,232
5 00.	400,618	435,429	453,810	472,832	479,251	499,089
10 00.	237,401	276,709	303,245	277,764	277,306	300,787
Total notes received.....No.	5,863,865	6,179,507	6,207,793	6,067,213	5,830,118	5,927,791
Total value, including postage stamps affixed.....\$	10,766,951	11,943,859	12,535,579	12,368,069	12,122,720	12,792,855
Commission received.....\$	122,908	131,757	134,516	131,913	127,964	132,393
Postal notes issued to postmasters...No.	6,068,140	6,386,535	6,339,230	6,094,255	5,901,171	5,902,035
Value of notes issued.....\$	11,251,125	12,430,270	12,948,457	12,548,384	12,304,949	13,026,166

76.—Issue of Postage Stamps, etc., fiscal years 1920-1921.

Denominations.	Issue 1920.		Issue 1921.	
	Number.	Value.	Number.	Value.
	No.	\$	No.	\$
1	264,990,800	2,649,908	272,271,500	2,722,715
2	275,349,700	5,506,994	288,531,300	5,770,626
3	371,778,700	11,153,361	403,395,000	12,101,850
5	23,622,850	1,181,142	23,930,850	1,196,543
7	14,784,800	1,034,936	12,454,100	871,787
10	20,869,975	2,086,997	25,735,700	2,573,570
20	2,883,000	576,600	4,168,300	833,660
50	460,405	230,203	667,325	333,663
10 Special Delivery.....	311,435	31,144	396,065	39,607
1 cent P. Due.....	643,900	6,439	714,000	7,140
2	1,241,950	24,839	1,594,350	31,887
5	293,150	14,658	400,100	20,005
1 cent stamp books, 25c. each.....	367,767	91,942	372,521	93,130
2 cent stamp books, 25c. each.....	260,173	65,043	274,690	68,672
1 cent rolls (sidewise).....	34,938	176,786	51,518	260,681
2	27,609	277,747	33,889	340,923
3	41,867	630,617	48,351	728,166
1 cent rolls (endwise).....	3,288	16,637	—	—
2	3,063	30,814	1,405	14,134
1 cent post bands at \$1.20 per 100.....	758,200	9,098	762,800	9,154
1 cent post cards.....	8,025,800	80,253	9,850,700	98,507
2 cent post cards.....	13,417,100	268,342	12,361,000	247,220
1 cent advertising cards, 16 on sheet.....	362,000	3,620	250,000	2,500
2	724,000	14,480	470,000	9,400
1 cent advertising cards, 8 on sheet.....	831,000	8,310	876,000	8,760
2	2,646,000	52,920	3,116,000	62,320
1 cent advertising cards, single.....	883,000	8,830	1,645,500	16,455
2	64,000	1,280	77,000	1,540
cent post cards for Postal Union countries.....	4,050	81	—	—
cent reply post cards.....	209,850	4,197	204,400	4,088
cent special wrappers.....	768,900	7,689	857,100	8,571
cent reply coupons.....	31,165	1,870	29,010	1,741
cent stamped envelopes, \$1.20 per 100.....	987,175	11,846	770,075	9,241
cent stamped envelopes, \$1.30 per 100.....	—	—	844,250	10,975
cent stamped envelopes, \$2.20 per 100.....	2,621,450	57,672	1,406,475	30,942
cent stamped envelopes, \$3.30 per 100.....	—	—	1,437,450	33,061
<b>Totals.....</b>	<b>1,010,302,560</b>	<b>26,317,195</b>	<b>1,069,998,724</b>	<b>28,563,234</b>

## XI.—LABOUR, WAGES AND PRICES.

## OCCUPATIONS OF THE PEOPLE.

The occupations of the people of a country at any given time are mainly determined by its natural resources and the stage which has been reached in their development. The outstanding characteristics of Canada are its enormous extent, its immense natural resources and the comparatively slight development of these, only the southern portions of the country being as yet at all developed. The developed areas fall into four economic units with quite distinct physical characteristics, first, the Maritime Provinces, where lands, forests, mines and fisheries are the chief natural resources; secondly, Ontario and Quebec, with lands, forests, mines and abundant water power for manufacturing purposes; thirdly, the Prairie Provinces, where the land is the chief natural resource except in Alberta, which contains immense coal deposits; lastly, British Columbia with fisheries, forests, and mines, where agriculture plays a comparatively minor part. Though, when the country as a whole is considered, the immense fertile areas of arable land must be considered as its chief natural resource, in different parts of its vast expanse other resources predominate, and give the key to the chief occupations of the people.

In Canada, as in other new countries, the labouring population (using the term in its widest sense) bears a larger proportion to the total than is the case in older civilizations where there exists more realized wealth.

In addition to our native-born workers, great numbers of young males and smaller numbers of females, who have nothing to sell but their personal services, immigrate from older countries to Canada to find here a better market for their labour. Thus both the sex distribution and the age distribution of the population of Canada is rendered somewhat abnormal, an unusually large percentage of that population being of working age and of the male sex—that is, of the sex which is most generally gainfully employed.

These statements may be illustrated from the Canadian census of 1911. (See Table 1). In that year out of a total population 10 years old and over of 5,514,388 in the nine provinces, 2,723,634 were returned as gainfully employed, being 49·39 p.c. of such population, or 37·93 p.c. of 7,179,650, the total ascertained population of the nine provinces. Thus, three out of every eight persons in the Dominion were gainfully employed, or four out of every eight persons ten years old and upwards.

**Male Labour.**—Considering the male population of 10 years old and upwards, it was found at the census of 1911 that no less than 79·54 p.c. or nearly four-fifths were gainfully employed. Further, if we take out those under 15 as being more properly at school training for the future than gainfully employed in the present and those over 65 as having earned the right to rest, we find that of the total male population between 15 and 65 no less than 92·73 p.c. was gainfully employed, a percentage which is increased to 96·28 p.c. if we con-

sider only those in the main productive 40 year period between 25 and 64 years old inclusive. Thus Canada is shown by its statistics to be emphatically, in so far as the males are concerned, a workers' country.

**Female Labour.**—The growth of the employment of females in gainful occupations between 1891 and 1911 is shown in Table 2. The figures found there may be supplemented by the information that in 1891, 11.07 p.c., in 1901, 12.01 p.c., in 1911, 14.31 p.c. of the female population 10 years old and over were gainfully employed—an increase from one-ninth to one-seventh of the female population of these ages during the 20 year period—a rate of increase which, in view of the labour conditions of the war and reconstruction period, will probably be found to have been maintained in the present decade.

It is significant that among females the age period during which there is the maximum of gainful employment is shown by the census to be that from 15 to 24 years inclusive. Of the female population of these ages, 27.78 p.c. were in 1911 gainfully employed, a percentage which fell to 12.14 p.c. for the period 25 to 64 years inclusive. As every employer of female labour knows, the decline is due to the absorption of female labour by marriage and home duties.

### 1.—Persons Engaged in Gainful Occupations in Canada, by Ages, 1911.

Age periods.	Males 10 years of age and over.			Females 10 years and over.		
	Total number.	Engaged in gainful occupations.		Total number.	Engaged in gainful occupations.	
		Number.	Per cent of total.		Number.	Per cent of total.
10 to 14 years.....	353,876	17,376	4.91	344,500	7,777	2.26
15 to 24 years.....	735,071	620,972	84.48	647,874	179,992	27.78
25 to 64 years.....	1,682,522	1,619,885	96.28	1,384,228	168,034	12.14
65 years and over.....	194,176	100,580	51.80	172,141	9,018	5.24
<b>Total 10 years and over</b>	<b>2,965,645</b>	<b>2,358,813</b>	<b>79.54</b>	<b>2,548,743</b>	<b>361,821</b>	<b>14.31</b>

### 2.—Number of Males and Females 10 years of Age and over Engaged in Gainful Occupations, by Provinces, 1881 to 1911.

Province.	1881. <sup>1</sup>	1891.		1901.		1911.	
	Male and Female.	Male.	Female.	Male.	Female.	Male.	Female.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	34,094	31,673	4,030	30,113	3,494	27,956	3,950
Nova Scotia.....	141,526	134,859	22,595	137,566	18,448	148,991	24,370
New Brunswick.....	105,289	94,261	13,456	98,058	13,807	103,275	16,491
Quebec.....	425,947	397,438	53,066	434,720	77,245	552,140	101,101
Ontario.....	625,591	535,765	94,460	645,322	108,625	836,135	154,878
Manitoba.....	23,162	50,669	4,315	77,418	8,575	155,900	22,206
Saskatchewan.....	3,993	20,759	994	45,145	2,993	195,247	13,275
Alberta.....						149,687	11,923
British Columbia....	17,933	44,955	3,074	76,541	4,762	189,482	16,627
<b>Canada.....</b>	<b>1,377,585</b>	<b>1,410,379</b>	<b>195,990</b>	<b>1,544,893</b>	<b>237,919</b>	<b>2,358,813</b>	<b>361,821</b>

<sup>1</sup>Workers were not classified by sex in 1881.



**Distribution of Labour Force by Industries.**—The distribution of the Canadian labour force by industries at the censuses from 1881 to 1911 is given by numbers and percentages employed in Table 3. The most notable features of this table are the great absolute increase of 52·7 p.c. between 1901 and 1911 in the gainfully employed population, the comparative decline of the agriculturists (in spite of the large absolute increase in their numbers) from 48·1 p.c. of the occupied population in 1881 to 34·3 p.c. in 1911, the increase of manufacturing workers from 11·7 to 18·0 p.c., of the traders from 5·7 to 10·4 p.c. and of transportation workers from 2·9 to 8·0 p.c. of the occupied population in the 30 year period. It should, however, be borne in mind that under present day conditions of specialization in industry many of those employed in trade, transportation and manufactures are doing work which formerly was performed by agriculturists and other primary producers for themselves.

**3.—Numbers and Percentage Distribution by Industries of Persons Engaged in Gainful Occupations, 1881 to 1911.**

NUMBERS.

Industry.	Workers Engaged.			
	1881.	1891.	1901.	1911.
	No.	No.	No.	No.
Agriculture.....	662,266	735,207	716,860	933,735
Building trades.....	230,873	185,599	213,307	246,201
Domestic and personal service.....	90,085	139,929	163,670	214,012
Civil and municipal government.....	7,938	18,267	17,306	76,604
Fishing and hunting.....	28,500	30,045	27,225	34,812
Forestry.....	8,116	12,812	16,764	42,914
Manufactures.....	161,535	227,080	274,175	491,342
Mining.....	7,160	16,127	28,650	62,767
Miscellaneous.....	13,005	—	490	—
Professional.....	48,461	62,623	83,219	120,616
Trade and merchandising.....	78,905	109,632	160,410	283,087
Transportation.....	40,741	69,048	80,756	217,544
<b>Total Workers.....</b>	<b>1,377,585</b>	<b>1,606,369</b>	<b>1,782,832</b>	<b>2,723,631</b>

PERCENTAGES IN EACH INDUSTRY.

Industry.	Workers Engaged.			
	1881.	1891.	1901.	1911.
	p.c.	p.c.	p.c.	p.c.
Agriculture.....	48·1	45·8	40·2	34·3
Building trades.....	16·8	11·6	12·0	9·0
Domestic and personal service.....	6·5	8·7	9·3	7·8
Civil and municipal government.....	0·6	1·1	1·0	2·8
Fishing and hunting.....	2·1	1·9	1·5	1·3
Forestry.....	0·6	0·8	0·9	1·6
Manufacture.....	11·7	14·1	15·4	18·0
Mining.....	0·5	1·0	1·6	2·3
Miscellaneous.....	1·0	—	—	—
Professional.....	3·5	3·9	4·6	4·5
Trade and merchandising.....	5·7	6·8	9·0	10·4
Transportation.....	2·9	4·3	4·5	8·0
<b>Total Workers.....</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>

**Distribution of Labour Force by Provinces.**—The extremely varied character of the occupations of the Canadian people, as conditioned by the various utilized natural resources of our immense territory, may be illustrated by reference to Table 4, which shows that in 1911 out of every 1,000 gainfully employed males, the number employed in agriculture varied from 127 in British Columbia to 673 in Saskatchewan and 684 in Prince Edward Island. Only 1 out of every 1,000 gainfully employed males was employed in mining in Prince Edward Island and 3 in Saskatchewan, as compared with 82 in British Columbia and 115 in Nova Scotia. In forestry only 2 out of every 1,000 were employed in Saskatchewan, Manitoba and Prince Edward Island, as compared with 62 in British Columbia. In fishing and hunting, the variation was from 3 per thousand in Manitoba to 98 per thousand in Nova Scotia. The males gainfully employed in manufacturing industries varied from 35 per thousand of the occupied population in Saskatchewan to 220 per thousand in Ontario. From this widely differing occupational distribution of the population in different parts of the country arise many of the divergencies of interest which are reflected in Canadian social and political life.

The industrial distribution of female labour is considerably more uniform than is the case with male labour, though even here there are great variations. In the largest class, those employed in domestic and personal service vary from 338 per 1,000 in Ontario to 536 in Saskatchewan, while in manufactures they vary from 57 in Saskatchewan to 335 in Quebec. Comparing the sexes, we find an enormously larger percentage of the gainfully employed women than of the gainfully employed men occupied in professional pursuits. Out of the 57,835 women returned as employed in professional pursuits in 1911, no fewer than 34,063 were teachers.

**4.—Percentage Distribution by Sexes of the Persons engaged in Gainful Occupations by Industries and Provinces, 1911.**

Occupations.	MALE.								
	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
<b>All industries.</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Agriculture.....	68.4	31.7	43.4	36.5	36.0	44.3	67.3	53.0	12.7
Building trades.....	6.2	3.4	11.4	12.3	10.0	11.9	7.3	8.1	12.7
Domestic and personal service.....	1.1	2.0	2.3	3.1	3.1	3.6	2.4	3.5	5.8
Civil and municipal government.....	.9	3.0	1.9	3.1	3.0	3.1	2.0	2.8	5.6
Fishing and hunting.....	4.8	9.8	2.8	.8	.4	.3	.9	.6	2.4
Forestry.....	.2	2.1	4.3	2.0	1.3	.2	.2	.5	6.2
Manufactures.....	6.5	14.5	15.7	19.6	22.0	9.5	3.5	5.7	16.7
Mining.....	.1	11.5	.8	1.0	2.0	.6	.3	3.5	8.2
Professional.....	2.2	2.0	2.1	2.9	2.7	3.1	1.9	2.4	3.4
Trade and merchandising.....	5.6	7.5	7.8	11.2	10.8	13.0	7.0	8.5	10.9
Transportation.....	4.0	7.5	7.5	7.5	8.7	10.4	7.2	11.4	15.4

#### 4.—Percentage Distribution by Sexes of the Persons engaged in Gainful Occupations by Industries and Provinces, 1911.—concluded.

Occupations.	FEMALE.								
	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
<b>All Industries.</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Agriculture.....	14.7	6.3	5.5	3.0	3.7	4.1	12.1	10.4	2.4
Building trades.....	.1	—	.1	—	.1	.1	—	.1	.1
Domestic and personal service.....	39.5	46.0	40.3	37.1	33.8	44.9	53.6	46.0	42.0
Civil and municipal government.....	.7	.9	1.0	.6	1.4	.9	1.8	1.9	1.1
Fishing and hunting.....	.4	.1	—	—	.1	—	.2	—	.4
Forestry.....	—	—	—	—	—	—	—	—	—
Manufactures.....	18.9	18.6	23.8	33.5	30.7	12.7	5.7	8.7	19.6
Mining.....	—	.1	—	—	—	—	—	—	.1
Professional.....	16.6	16.6	18.1	15.2	14.5	19.4	18.0	20.7	19.5
Trade and merchandising.....	8.6	10.0	10.0	9.0	13.8	14.0	7.4	10.4	12.2
Transportation.....	.5	1.4	1.2	1.6	1.9	3.9	1.2	1.8	2.6

**Distribution of Labour Force by Nativity.**—While at the census of 1911, those born outside of Canada constituted approximately only 22 p.c. of the total population, these 22 p.c., because they contained a large proportion of young, strong males, contributed no less than 31.91 p.c. of those engaged in gainful occupations. As is shown in Table 4, they constituted even a larger proportion of those engaged in domestic and personal service, in civil and municipal government, in mining and transportation, while they fell short of reaching their general proportion to the occupied population in agriculture, forestry, fishing and hunting—that is, in all the primary industries except mining.

#### 5.—Numbers and Percentage Distribution by Nativity, Sex and Industries of Persons Engaged in Gainful Occupations, 1911.

##### NUMBERS.

Class of Occupation.	Total Workers.		Male Workers.		Female Workers.	
	Male.	Female.	Born in Canada.	Born outside of Canada.	Born in Canada.	Born outside of Canada.
Agriculture.....	917,848	15,887	667,207	250,641	11,954	3,933
Building trades.....	245,990	211	157,274	88,716	176	35
Domestic and personal service.....	75,133	138,879	38,597	36,536	90,904	47,975
Civil and municipal government.....	72,531	4,073	40,356	32,175	3,522	551
Fishing and hunting.....	34,547	265	31,601	2,946	258	7
Forestry.....	42,901	13	31,403	11,498	8	5
Manufactures.....	392,781	98,561	253,882	138,899	81,240	17,321
Mining.....	62,706	61	29,890	32,816	51	10
Professional.....	62,781	57,835	43,811	18,970	49,862	7,973
Trade and merchandising.....	240,903	42,184	167,289	73,614	34,471	7,713
Transportation.....	210,692	6,852	115,143	95,549	5,539	1,313
<b>All Occupations.....</b>	<b>2,358,813</b>	<b>364,821</b>	<b>1,576,453</b>	<b>782,360</b>	<b>277,985</b>	<b>86,836</b>

**5.—Numbers and Percentage Distribution by Nativity, Sex and Industries of Persons engaged in Gainful Occupations—concluded.**

PERCENTAGES.

Class of Occupation.	Total Workers.		Male Workers.		Female Workers.	
	Male.	Female.	Born in Canada.	Born outside of Canada.	Born in Canada.	Born outside of Canada.
Agriculture.....	98.30	1.70	72.69	27.31	75.24	24.76
Building trades.....	99.91	.09	63.94	36.06	83.41	16.59
Domestic and personal service.....	35.10	64.89	51.37	48.63	65.45	34.55
Civil and municipal government.....	94.68	5.32	55.64	44.36	86.47	13.53
Fishing and hunting.....	99.24	.76	91.47	8.53	97.35	2.65
Forestry.....	99.97	.03	73.20	26.80	61.54	38.46
Manufactures.....	79.94	20.06	64.64	35.36	82.43	17.57
Mining.....	99.90	.09	47.67	52.33	83.60	16.40
Professional.....	52.05	47.95	69.78	30.22	86.21	13.79
Trade and merchandising.....	85.09	14.91	69.44	30.56	81.72	18.28
Transportation.....	96.85	3.15	54.65	45.35	80.84	19.16
<b>All Occupations.....</b>	<b>86.61</b>	<b>13.39</b>	<b>66.83</b>	<b>33.17</b>	<b>76.20</b>	<b>23.80</b>

## DOMINION DEPARTMENT OF LABOUR.

The Department of Labour of the Dominion Government was established in 1900 under the authority of the Conciliation Act, 1900 (63-64 Vict., c. 24). Its chief duties originally comprised the administration of certain provisions of this statute designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wage policy for the protection of workmen employed on the Dominion Government contracts and works aided by grant of public funds, the collection and classification of statistical and other information relative to conditions of labour, and the publication of a monthly periodical known as the "Labour Gazette." From 1900 to 1909, the Department was administered by the Postmaster General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909 (8-9 Edw. VII, c. 22).

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act, 1907 (6-7 Edw. VII, c. 20). The Department is also charged with the administration of an Act passed in 1918 known as the Employment Offices Co-ordination Act (8-9 Geo. V, c. 21), and of the Technical Education Act, enacted in 1919 (9-10 Geo. V, c. 73). The scope of the Department has increased in other directions, especially in the investigation of questions relating to the cost of living.

**Industrial Disputes Investigation Act.**—The Industrial Disputes Investigation Act, 1907 (6-7 Edw. VII, c. 20) has attracted considerable favourable attention from legislators and publicists throughout the world. It distinctly forbids strikes or lockouts in industrial disputes affecting mines and public utilities, until the matters in



dispute have been submitted for the report of a Board of Conciliation and Investigation, consisting of three members, two appointed by the Minister of Labour on the recommendation of the respective parties to the dispute, the third on the recommendation of the first two, or if they fail to agree, by the Minister himself. After their report has been made, either of the parties to the dispute may reject it and declare a strike or lockout, which, however, is likely to involve the loss of the sympathy and support of the general public. The effect has been to diminish greatly the number of strikes and lockouts in such industries. On the application of the parties to the dispute, the machinery of the Act may be extended to other industries. A review of the proceedings under the Industrial Disputes Investigation Act from its enactment in March, 1907, to the end of the fiscal year 1921, shows that in the fourteen years, 509 applications were received for the establishment of boards of conciliation and investigation, as a result of which 370 boards were established. In all but 33 cases strikes (or lockouts) were averted or ended. In the fiscal year ended March 31, 1921, 63 applications for the establishment of boards of conciliation and investigation were received, and 37 boards were established. Strikes (or lockouts) were averted in all but six cases.

**Fair Wages Branch.**—The Fair Wages Branch of the Department of Labour is charged with the preparation of schedules of minimum wage rates, which are inserted in Dominion Government contracts, and must be adhered to by contractors in the execution of the respective works. The number of fair wages schedules prepared since the adoption of the Fair Wages Resolution in 1900 up to the end of the calendar year 1921 is 3,930, of which 26 were prepared during the year 1921.

Fair wage conditions are also inserted in contracts for the manufacture of certain classes of government supplies, and in contracts for all railway construction to which the Dominion Government has granted financial aid, either by way of subsidy or guarantee.

The Department of Labour is also frequently consulted by other departments of the Government regarding the wage rates to be observed in connection with work undertaken on the day labour plan.

**Labour Legislation.**—Much attention is devoted to labour legislation. Information as to new laws enacted by the Dominion and the Provinces is kept up to date, while notes or articles regarding their provisions are published in the "Labour Gazette." Since 1917, the Department has published annual reports containing the text of Canadian labour laws enacted during the year, together with an introduction summarizing this legislation under subject headings. These reports are based on a consolidation of Dominion and Provincial labour legislation as existing at the end of 1915, which was made from the most recent Revised Statutes and the subsequent annual volumes of statutes up to 1915 and which formed the Department's report on labour legislation for 1915. Reports on the labour

laws enacted in the four subsequent years have been published in regular order. The report for 1920 is similar to that for 1915, being a consolidation of Canadian labour legislation as existing at the end of 1920. The text of the Dominion and Provincial labour laws forms the larger part of the volume. In order to preserve the uniformity of the series, the legislation enacted in 1920 is summarized in a manner similar to that of the preceding reports. Another part of the introduction takes the form of an outline of the principal developments in the field of labour legislation in Canada during the quinquennium 1915-20. In this connection, consideration is given to the action taken at the International Labour Conferences held at Washington and Genoa pursuant to the Treaty of Versailles.

The advantage of uniformity in the laws relating to the welfare of persons engaged in industrial work in the several provinces was pointed out by the Royal Commission of 1919 on Industrial Relations in Canada. This view was supported by a resolution of the National Industrial Conference which was held in Ottawa in September, 1919. A commission was established in 1920, composed of representatives of the Dominion and Provincial Governments and of employers and workers respectively, to consider the foregoing subject. This commission met in Ottawa between April 26 and May 1, 1920, and formulated recommendations looking to greater uniformity in the provincial laws relative to workmen's compensation, factory control, mining and minimum wages for women and girls.

**Joint Industrial Councils.**—One section of the report of the Royal Commission of 1919 on Industrial Relations, related to shop committees and industrial councils. The Commissioners strongly urged the adoption in Canada of the principles underlying the Whitley Councils and other kindred systems. The subject was discussed also at the National Industrial Conference, composed of representatives of the Dominion and Provincial Governments and representative employers and labour men, held at Ottawa in September, 1919. The committee to which the matter was referred reported unanimously in the following terms:—

"Your committee is of the opinion that there is urgent necessity for greater co-operation between employer and employee. We believe that this co-operation can be furthered by the establishment of joint industrial councils. Your committee does not believe it is wise or expedient to recommend any set plan for such councils.

"We therefore recommend that a bureau should be established by the Department of Labour of the Federal Government to gather data and furnish information whenever requested by employers and employees or organizations of employers or employees that whenever it is desired to voluntarily establish such councils the fullest assistance should be given by the bureau."

While it has not been deemed necessary or desirable at the present time to establish a bureau for the purposes outlined in the resolution of the National Conference, the department has entered heartily into the spirit of the resolution and has continued and extended its study of joint industrial councils and kindred systems. Employers throughout Canada, at the request of the department, have furnished

information regarding joint councils or committees in their establishments, and the information thus received, together with information regarding similar systems in other countries, has been assembled and published as a supplement to the "Labour Gazette" of February, 1921. During the same month a conference on these matters took place at the call of the Minister of Labour, there being present representatives of a number of the larger employing companies in Canada which have established joint councils with their employees.

At a joint meeting of representatives of the international unions of the building trades and members of the Standing Labour Committee of the Association of Canadian Building and Construction Industries, and representatives from special branches of the industry, held at Hamilton, May 26, 1920, resolutions were unanimously carried, setting up a National Joint Conference Board of the Building and Construction Industries of Canada, to be composed of joint representatives elected or selected by the Association of Canadian Building and Construction Industries and five members elected or selected by the representatives of the building trades international unions. The resolution included a request that the Dominion Government appoint a representative to act as chairman and convener of this National Joint Conference Board. The functions of the Board are of an educational and advisory nature, but it may deal with disputes referred to it for settlement by affiliated local organizations or establish local industrial boards. It is also charged with the encouragement of the organization of employers and workmen of the building and construction industries into local joint industrial boards for the settlement of disputes in the building and construction industries of Canada, and local joint industrial boards have been organized in the building trades in Hamilton, Ottawa, London, Toronto, Saskatoon and Vancouver.

The Canadian Railway Board of Adjustment No. 1 formed during the war, though not precisely a joint council, is a board of twelve members, one-half of whom are representatives of railways, named by the Canadian Railway Association, and one-half representatives of the six railway workers unions which are parties to the agreement: (1) Brotherhood of Locomotive Engineers; (2) Brotherhood of Locomotive Firemen and Enginemen; (3) Order of Railway Conductors; (4) Brotherhood of Railroad Trainmen; (5) Order of Railroad Telegraphers; (6) United Brotherhood of Maintenance-of-Way Employees and Railway Shop Labourers. The agreement provided for the reference to the board of all disputes and that the decision of the board should be final. The board served admirably during the war and the agreement has since been formally renewed. The same plan is perhaps not applicable in its entirety to other industries, but its continuance and marked success are illustrations of the increasing disposition to dispose of industrial differences by direct negotiation between the parties concerned.



**CANADA AND THE INTERNATIONAL LABOUR ORGANIZATION.<sup>1</sup>**

The International Labour Organization was set up in accordance with Part XIII of the Treaty of Versailles. The general object of the Organization is given in the preamble to that document:—

"Whereas the League of Nations has for its object the establishment of universal peace, and such a peace can be established only if it is based upon social justice;

"And whereas conditions of labour exist involving such injustice, hardship and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperilled; and an improvement of those conditions is urgently required; as, for example, by the regulation of the hours of work, including the establishment of a maximum working day and week, the regulation of the labour supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease and injury arising out of his employment, the protection of children, young persons and women, provision for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of freedom of association, the organization of vocational and technical education and other measures;

"Whereas also the failure of any nation to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve the conditions in their own countries;

"The High Contracting Parties, moved by sentiments of justice and humanity as well as by the desire to secure the permanent peace of the world, agree to the following."

The scheme of organization provides for an International Labour Conference to be held at least once a year and a permanent International Labour Office.

The International Labour Conference is composed of four delegates from each Member of the Organization, two representatives of the government, one of the employers and one of the workpeople. Its task is to consider proposals dealing with questions similar to those laid down in the preamble, and to embody its findings in draft conventions or recommendations. Each Member binds itself to bring such of these conventions and recommendations as are adopted by a two-thirds majority of the Conference before the competent authority or authorities. The authority has complete liberty to decide whether or not it will ratify any or all of these conventions and what action, if any, it will take on the recommendations.

It is of special interest to Canada that the Treaty recognizes the limited power of a federal government and provides that in the case of a federal state, the authority of which to enter into conventions on labour matters is limited, the federal government may treat a draft convention as a recommendation only.

Article 396 of the Treaty states that "the functions of the International Labour Office shall include the collection and distribution of information of all subjects relating to the international adjustment of conditions of industrial life and labour and particularly the examination of subjects which it is proposed to bring before the Conference with a view to the conclusion of international conventions and the conduct of such special investigations as may be ordered by the Conference."

<sup>1</sup>Contributed by Gerald H. Brown, Esq., Assistant Deputy Minister, Department of Labour, Ottawa.



The International Labour Office is required to collect all available information in regard to the problems to be dealt with and to prepare draft conventions or recommendations for submission to the Conference. The work of the Office has been divided for the proper performance of its duties into two divisions, namely: the Diplomatic Division, which conducts the correspondence with Governments and is called upon to deal "with the questions connected with the obligations entailed by the labour provisions of the Treaty and in particular with those relating to the work of the International Labour Conference," and the Scientific Division, which is "responsible for the collection, compilation and dissemination of information of international interest and importance about industry and labour conditions in all countries." Technical services have been created to supply the necessary information on technical questions such as maritime problems, industrial hygiene, employment and unemployment, hours of labour, agriculture, alien labour, employment of women, home work, wages, social insurance, education and co-operation.

The first session of the International Labour Conference was held at Washington in October and November, 1919, in accordance with Article 424 of the Treaty of Peace. The subjects to be considered at this first Conference were stipulated in the Treaty and included the application to industry of the principle of the eight-hour day or forty-eight hour week; the prevention or mitigation of unemployment; the employment of women before and after childbirth, during the night and in unhealthy processes; the employment of children during the night and in unhealthy processes, and the age at which they should be employed; the extension and application of the International Convention adopted at Berne in 1906 on the prohibition of night work for women and of the use of white phosphorus in the manufacture of matches. As some of the items on the agenda related to matters falling within the jurisdiction of the provinces, the Canadian Government delegates were accompanied by advisers nominated by the provinces.

The second session of the International Labour Conference was held at Genoa in June and July, 1920, and in accordance with a resolution adopted at the Washington Conference, was devoted to the consideration of matters relating to seamen. Draft conventions were adopted regarding facilities for finding employment for seamen, the minimum age of employment of children on board ship and unemployment indemnity in case of loss or foundering of ship. Recommendations were passed concerning hours of work in inland navigation, hours of work on fishing vessels, unemployment insurance for seamen and the establishment of national seamen's codes. Resolutions were also adopted for the instruction and guidance of the International Labour Office concerning the prevention and treatment of venereal disease in the mercantile marine, insurance against unemployment, special clauses in articles of agreement and seamen's codes and the education of children or apprenticed seamen. The prohibition of the employment of trimmers and stokers under eighteen

years of age, the medical examination of children before employment on board ship and the education of children were referred to the next Conference for consideration. These last mentioned subjects were dealt with at the Conference of 1921.

A Joint Maritime Commission composed of twelve persons was appointed to advise the International Labour Office on questions relating to seamen.

The third annual meeting of the International Labour Conference was held at Geneva in October and November, 1921. An invitation was extended by the Dominion Government to the Provincial Governments to be represented at this Conference. Three of the provinces, namely Ontario, Manitoba and Quebec, accepted the invitation and their representatives were appointed as advisers to the Government delegates.

The discussions of the Conference resulted in the adoption of Draft Conventions regarding the minimum age of trimmers and stokers on ships, medical inspection of children and young persons on ships, the use of white lead in painting, the right of association of agricultural workers, workmen's compensation for agricultural workers, the employment of children in agriculture, and a weekly rest in industrial undertakings. Recommendations were made concerning agricultural workers in relation to technical education, unemployment, social insurance, night work of women and children, maternity and housing conditions and concerning a weekly rest in commercial establishments.

On receipt from the Secretary-General of the League of Nations of the texts of the draft conventions and recommendations of these three International Labour Conferences, they were referred to the Department of Justice for examination as to the legislative authority of the Dominion and the provinces to deal with the subject matters in question. Certain of the draft conventions and recommendations were found to be within provincial authority and were accordingly referred to the Provincial Governments, whilst those within federal jurisdiction are engaging the attention of the Dominion Government. The opinion of the Department of Justice on the Geneva draft conventions and recommendations has not yet (May 27, 1922) been rendered.

To date (May 27, 1922) the decisions of the First International Labour Conference, held in Washington, D.C., in 1919, have led to the enactment of more than 50 statutes bearing on labour matters in various countries, and to the preparation of over 100 separate bills. The Second International Labour Conference of 1920, which was devoted entirely to the consideration of matters affecting seamen, has been followed by the adoption of three laws and the preparation of about 30 separate bills. The Third International Labour Conference, held in October and November, 1921, has already led to the preparation of two bills.

**ORGANIZED LABOUR IN CANADA.**

The labour movement in Canada is of comparatively recent growth. In all the countries where a widespread national labour movement has arisen, it has done so only when, through the increase of large scale production involving increased investment of capital, the impossibility of the average labourer ever rising into the position of an employer has been demonstrated. When this happens the instinct of class consciousness is excited, and labourers, realizing that great individual success in the future is for them improbable, band themselves together to secure higher wages and greater comfort in the present.

For these reasons, the modern labour movement took its rise in England—the first country to be affected by the so-called Industrial Revolution—the change from hand to machine production. Where this change takes place, business skill—skill displayed in bargaining for raw material, for needed capital, for labour, for the sale of finished products—becomes the predominant factor in business success, rather than technical skill, and the skilled labourers who possess technical but not business skill, find themselves labouring throughout their lives for the entrepreneur. By the organization of trade unions for collective bargaining they attempt with more or less success to change the situation to their advantage.

Trade Unionism in Canada occupies a unique position by reason of the fact that most organized workers in the Dominion are members of organizations whose headquarters are located in a foreign country, viz.: the United States. This condition is explained when it is understood that workers move freely from one country to the other in order to find employment. In years gone by Canadian workmen who sought a livelihood in the United States greatly outnumbered those from the latter country who came to Canada. As industry was further developed in the United States, there arose a number of unions of various crafts, and with these the Canadian workers soon became affiliated. With the development of industry in the Dominion many of these Canadians subsequently returned to their native land, bringing with them the gospel of trade unionism and collective bargaining as a means of protecting their rights. In many instances these trade unionists became the nuclei of strong bodies of organized labourers formed in Canadian cities.

In the early part of the nineteenth century, a number of independent trade associations were formed in Canada, the earliest of which there is record being a printers' organization in Quebec city in 1827. The first union known to have been organized in the province of Ontario was also composed of printers, and operated in York (now Toronto), as early as 1834; both of these bodies were later superseded by branches of the International Typographical Union, which body in 1869 changed its name from National Typographical Union of the United States, on account of the inclusion of Canadian branches.

In 1851 a branch of the Amalgamated Society of Engineers, a British organization composed of metal mechanics, was established in Toronto. In the years immediately following other branches were



organized in other Canadian cities, the society having the whole Dominion for its operations. In 1888 the United Machinists and Mechanical Engineers of America was formed and entered the field as a competitor for the organization of the craftsmen eligible for membership in the Amalgamated Society. The first Canadian lodge (No. 103) of the new body was formed in Stratford, Ont., in 1890, while lodges in Montreal (No. 111) and in Winnipeg (No. 122) were organized before the close of the same year. To meet the extension of the jurisdiction into Canada the name of the organization was changed in 1891 to International Association of Machinists. Since that time the organization has added greatly to its Canadian following, having at the close of the year 1921 99 local lodges with a combined membership of 10,135. On the other hand, the Amalgamated Society never added very greatly to its Canadian following, the largest number of local branches and members on record being in 1919, when they stood at 24 and 3,000 respectively. Negotiations were opened in 1919 by the general officers of the Amalgamated Society of Engineers and the International Association of Machinists, with a view to effecting an amalgamation. As a result the Amalgamated Society on Sept. 30, 1920, withdrew its operations from Canada and also from the United States, where branches were also in existence, leaving the whole North American continent to the International Association of Machinists. Another British labour organization to establish branches in Canada was the Amalgamated Society of Carpenters and Joiners, now the Amalgamated Society of Woodworkers, which in 1860 chartered a branch in Toronto, twenty-one years before the United Brotherhood of Carpenters and Joiners, now the chief organization in North America of the craft named, came into existence. In this case also bickerings finally led to a unification whereby the members of the Amalgamated Society became also members of the United, retaining their connection with the parent body for the beneficial features. The only other branch of a British labour organization in Canada is a lodge in Hazelhill, N.S., of the Association of Wireless and Cable Telegraphers. With the practical elimination of the British organizations, the North American field has been left entirely to the labour organizations originating on this continent. These labour bodies are for the most part in affiliation with the American Federation of Labour, which in addition to dealing with trade matters speaks for the organized workers in the United States on the subject of legislation. In Canada the legislative mouthpiece of organized labour is the Trades and Labour Congress, which body is strongly representative of the international labour movement, its affiliated membership being largely drawn from international organizations which have in the first place been affiliated to the American Federation of Labour. Under the travelling card system now in vogue members of the respective unions move as they desire between the two countries and are entitled to all rights and privileges established in the various localities where local branches are in existence. Canadian members of international organizations are eligible for the highest offices in the gift of their organizations, and in some instances have been elected to these posts.



In addition to the international trade union membership in Canada there are labour bodies which are termed non-international. Some of these organizations were formed by former members of international unions which for various reasons severed their connection with the parent bodies. There are also a number of independent labour unions in the Dominion, their origin in a few instances being an outcome of grievances against their central organizations not being settled to the satisfaction of the complaining branches.

A statement of the development of organized labour in Canada would not be complete without a reference to the Knights of Labour, an organization formed in the United States in 1869, to which all classes of workers were admitted. The Knights of Labour, which in 1885 reached its greatest numerical strength, with about a million members, extended its jurisdiction into Canada, establishing district and local assemblies in many localities in the Dominion, seventeen of which were operating in 1891 in the province of Quebec. Soon after the latter date, internal dissension took place in the ranks of the organization, owing to the difficulty of uniting workers of different crafts in one body. The international craft organizations, which had in the meantime become united under the banner of the American Federation of Labour, formed in 1881, offered strong opposition to the Knights of Labour, which in a few years ceased to be a factor in the labour movement of the continent. All of its Canadian "Assemblies" have long since passed out of existence.

**Trades and Labour Congress of Canada.**—Through the initiative of the Toronto Trades Assembly (now the Toronto District Trades and Labour Council) the first national labour organization, the Canadian Labour Union, was formed in Toronto in September, 1873. The organization held its second and third annual meetings in 1874 and 1875, but disappeared as a result of the serious depression of the later 70's. In 1883 the Trades and Labour Council of Toronto, feeling the necessity of the wage earners of Canada having a medium through which to express their opinions, assumed the responsibility of calling another trades and labour congress, which met in Toronto on Dec. 26, with 45 delegates. On the summons of the Toronto council a second meeting, with 109 delegates, assembled on Sept. 14, 1886, the first occasion on which any labour body outside of the province of Ontario was represented. A permanent organization was effected at this meeting under the name of "Trades and Labour Congress of the Dominion of Canada." This was the title of the organization until 1895, when the title "Trades and Labour Congress of Canada" was adopted in preference to "Canadian Federation of Labour." Since 1886 conventions have been held annually, the 1921 meeting in Winnipeg being counted as the thirty-seventh. The Trades and Labour Congress is representative of international trade unionism in the Dominion, the bulk of its membership being drawn from the international organizations which have local branches in Canada. According to reports for 1921 the congress received payment of per capita tax from 58 international bodies which had

affiliated the whole of their Canadian membership, numbering 150,812, in 1,699 local branches. In addition three national organizations affiliated their whole membership of 9,771, in 210 branches. With other affiliations and unions directly under charter the congress had in all at the close of 1921 a membership of 173,778, in 1,964 branches.

**Membership of International Organizations in Canada.**—

At the close of 1921 there were 98 international organizations having one or more local branch unions in Canada, three fewer than in 1920. These bodies between them have 2,223 local branches in the Dominion with 222,896 members, a decline of 232 branches and 44,351 members as compared with the previous year. The international organizations have 83 per cent of the local branches of all classes in the Dominion, and 71 per cent of the members.

**Canadian Federation of Labour.**—The Canadian Federation of Labour was organized in 1902 under the name of National Trades and Labour Congress as the result of the expulsion from the Trades and Labour Congress of Canada of the Knights of Labour assemblies and all other unions which were composed of members of crafts over which existing international organizations claimed jurisdiction. The delegates of the expelled unions forthwith formed a new central body of a distinctively national character, which in 1908 adopted its present name. For a number of years labour bodies in the province of Quebec were the main support of the new organization. Gradually the Quebec affiliations dropped off and the centre of activity was a few years ago shifted to Toronto. The membership of the Federation at the close of 1921 stood at 7,430, comprised in 32 directly chartered local branches. Two central bodies are also affiliated with the Federation.

**Non-International Trade Union Membership.**—There are in Canada fifteen organizations of wage earners termed non-international unions, eight of which are in direct opposition to the international organizations. In some instances these non-international bodies have been formed by secessionists from international unions. The combined membership of the non-international organizations is 24,980, comprised in 264 local branches.

**Membership of Independent Units.**—There are 27 independent local labour bodies in the Dominion, 21 of which have a membership of 15,644. The remaining six have not reported as to their standing.

**Federation of Catholic Workers of Canada.**—During the period that the Knights of Labour operated in Quebec there existed also four independent unions, one of labourers and three of leather and shoe workers. Up to 1902 these several bodies were represented at the annual conventions of the Trades and Labour Congress of Canada. In that year, in an effort to eliminate a duplication of unions, and to bring the independent bodies under the banner of the

international organizations, the Trades Congress denied them further representation. The Knights of Labour assemblies gradually disappeared, but the independent unions continued to exist. With the advent of the Mutual Labour Federation of the North in 1912, the first organization to confine membership to adherents of the Roman Catholic church, a stimulus was given to this movement, and several of the existing independent unions, the number of which had increased during the decade from 1902 to 1912, became identified with what are termed National and Catholic unions. In 1918 a conference of these bodies was held in Quebec city, followed by other meetings in Three Rivers in 1919 and in Chicoutimi in 1920, the delegates at the latter conference, numbering 225, from 120 unions, deciding to establish a permanent central body to co-ordinate the work of the scattered units. Accordingly at the 1921 conference held in Hull, at which approximately 200 delegates were present representing 89 unions, a constitution to govern the new body was approved. The name selected was Federation of Catholic Workers of Canada, and permanent officers were elected, the constitution and bylaws to become effective on January 1, 1922. From information at hand, there are 120 National and Catholic unions with a combined membership of 45,000.

**One Big Union.**—Owing to dissatisfaction with the alleged reactionary policy of the Trades and Labour Congress of Canada, a number of delegates from Western Canada to the Quebec convention in 1918 held a caucus for the purpose of having the delegates from the western unions concentrate their energies towards having the Trades Congress legislate in accordance with the views of these bodies. Some months later a meeting of delegates was called by the British Columbia Federation of Labour, to assemble immediately following the annual convention of that body, which for the first time in its history met outside of the province under its jurisdiction, in the city of Calgary. The conference assembled on March 13, 1919, with 239 delegates present; the outcome of the meeting was the formation of an industrial organization, the "One Big Union." On June 11, 1919, a conference of the advocates of the new body was held in Calgary to further the plans of organization. The next meeting, termed the first semi-annual convention, was held in Winnipeg in January, 1920. The O.B.U. had made much progress during its short existence, with a membership of 41,150 at the close of 1919. From the outset the O.B.U. met with much opposition from the old-established labour unions, as represented by the Trades and Labour Congress of Canada, which are opposed to the substitution of industrial unionism for the existing system of craft unions. During the years 1920 and 1921 the O. B. U. has been on the decline, many of the early supporters having deserted the organization, and the membership has dropped to approximately 5,300.

**Total Reported Membership of Organized Labour in Canada.**—At the close of 1921 the numerical strength of organized labour in Canada is given by the Department of Labour as follows: International organizations, 2,223 local branches with an aggregate



membership of 222,896; non-international organizations, 264 branches and 24,480 members; independent units, 27 with 15,644 members; National and Catholic unions, 120 with 45,000 members; and One Big Union, 34 units, with 5,300 members. Grand total, 2,668 local branches and 313,320 members, decreases as compared with 1920 of 250 branches and 60,522 members.

Table 6 shows by years the membership of trade unions in Canada since 1911.

6.—Membership of Trade Unions in Canada, 1911-1921.

Year.	Members.	Year.	Members.
1911.....	133,132	1917.....	204,630
1912.....	160,120	1918.....	248,887
1913.....	175,799	1919.....	378,047
1914.....	166,163	1920.....	373,842
1915.....	143,343	1921.....	313,320
1916.....	160,407		

**International Trade Unions Operating in Canada.**—Table 7 gives the names of the 98 international labour organizations which have extended their operations into Canada, and contains (1) the number of branches which were in existence in the Dominion at the close of 1921 and (2) the reported membership.

7.—International Trade Unions Operating in Canada.

NUMBER OF BRANCHES AND NUMBER OF MEMBERS IN CANADA, DECEMBER, 1921.

International Organizations.	Number of Branches in Canada.	Reported Membership in Canada.
American Federation of Labour.....	17	992
Asbestos Workers, International Association of Heat and Frost Insulators, and..	3	110
Automobile, Aircraft and Vehicle Workers of America, United.....	1	36
Bakery and Confectionery Workers' International Union of America.....	11	424
Barbers' International Union of America, Journeymen.....	34	1,259
Bill Posters and Billers of America, International Alliance of.....	2	60
Blacksmiths, Drop Forgers and Helpers, International Brotherhood of.....	27	1,500
Boilermakers, Iron Shipbuilders and Helpers, International Brotherhood of....	46	3,354
Bookbinders, International Brotherhood of.....	11	588
Boot and Shoe Workers' Union.....	18	2,091
Brewery, Flour, Cereal and Soft Drink Workers, International Union of the United.....	13	603
Bricklayers, Masons and Plasterers' International Union of America.....	52	3,824
Bridge, Structural and Ornamental Iron Workers, International Association of...	17	1,721
Broom and Whisk Makers' Union, International.....	1	17
Carpenters and Joiners of America, United Brotherhood of.....	136	11,138
Carvers' Association of America, International Wood.....	1	25
Cigarmakers' International Union of America.....	13	770
Cloth Hat and Cap Makers of America, United.....	3	400
Clothing Workers of America, Amalgamated.....	15	9,750
Commercial Telegraphers' Union of America.....	8	1,500
Conductors, Order of Sleeping Car.....	1	16
Coopers' International Union of North America.....	1	23
Electrical Workers, International Brotherhood of.....	45	4,340
Elevator Constructors, International Union of.....	1	45
Engravers' League, International Steel and Copper Plate.....	1	13
Federal Employees, National Federation of.....	1	200
Fire Fighters, International Association of.....	14	2,000
Fur Workers' Union, International.....	5	518
Garment Workers of America, United.....	13	2,000
Garment Workers' Union, International Ladies'.....	10	2,079
Glass Bottle Blowers' Association of the United States and Canada.....	4	190
Glass Workers' Union, American Flint.....	3	262



## 7.—International Trade Unions Operating in Canada—concluded.

NUMBER OF BRANCHES AND NUMBER OF MEMBERS IN CANADA, DECEMBER 1921.—concluded.

International Organizations.	Number of Branches in Canada.	Reported Membership in Canada.
Glove Workers' Union of America, International.....	1	175
Granite Cutters' International Association of America.....	6	230
Hod Carriers, Building and Common Labourers' Union of America, International.....	7	143
Hotel and Restaurant Employees' International Alliance and Bartenders' International League of America.....	13	1,316
Iron, Steel and Tin Workers, Amalgamated Assoc. of.....	13	1,350
Jewellery Workers' Union, International.....	5	535
Lathers, International Union of Wood, Wire and Metal.....	6	150
Laundry Workers' International Union.....	1	85
Leather Workers' International Union, United.....	3	56
Lithographers of America, Amalgamated.....	7	510
Longshoremen's Association, International.....	23	2,473
Locomotive Engineers, Brotherhood of.....	95	6,000
Locomotive Firemen and Enginemen, Brotherhood of.....	101	8,059
Machinists, International Association of.....	99	10,135
Maintenance-of-way Employees and Railway Shop Labourers, United Brotherhood of.....	182	12,000
Masters, Mates and Pilots, National Assoc. of.....	1	93
Meat Cutters and Butcher Workmen, Amalgamated.....	1	25
Metal Polishers' International Union.....	9	174
Metal Workers' International Alliance, Amalgamated Sheet.....	23	600
Mine Workers of America, United.....	66	20,000
Mine, Mill and Smelter Workers, International Union of.....	7	185
Moulders' Union of North America.....	39	3,288
Musicians, American Federation of.....	46	7,000
Painters, Decorators and Paperhangers of America, Brotherhood of.....	43	2,019
Papermakers, International Brotherhood of.....	14	1,060
Pattern Makers' League of North America.....	14	504
Paving Cutters' Union of the United States and Canada.....	7	125
Photo Engravers' Union of North America, International.....	6	347
Piano, Organ and Musical Instrument Workers' International Union.....	1	29
Plasterers and Cement Finishers' International Association, Operative.....	16	1,084
Plumbers, Gas and Steam Fitters, United Association of.....	41	3,000
Potters, National Brotherhood of Operative.....	1	45
Printers and Die Stammers' Union, International Plate.....	1	46
Printing Pressmen and Assistants' Union, International.....	16	745
Pulp, Sulphite and Paper Mill Workers of the United States and Canada, International Brotherhood of.....	18	4,000
Quarry Workers' International Union of North America.....	2	400
Railroad Employees, Canadian Brotherhood of.....	137	12,700
Railroad Signalmen of America, Brotherhood of.....	4	109
Railroad Stationmen and Railroad Employees' Alliance, International Brotherhood of.....	11	522
Railroad Telegraphers, Order of.....	12	7,200
Railroad Trainmen, Brotherhood of.....	95	14,567
Railway Carmen of America, Brotherhood of.....	113	11,593
Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, Brotherhood of.....	58	4,000
Railway Conductors, Order of.....	70	4,360
Railway Employees of America, Amalgamated Association of Street and Electric Railway Employees of North America, United Association of.....	28	11,309
Retail Clerks' International Protective Assoc.....	6	750
Roofers, Damp and Waterproof Workers' Association, United Slate, Tile and Composition.....	4	120
Seamen's Union of America, International.....	2	75
Steam and Operating Engineers, International Union of.....	6	2,000
Steam Shovel and Dredgemen, International Brotherhood of.....	20	1,280
Stage Employees, International Alliance of Theatrical.....	6	725
Stationary Firemen and Oilers, International Brotherhood of.....	34	1,100
Stereotypers and Electrotypers' Union, International.....	15	1,000
Stonecutters' Association of North America, Journeymen.....	10	265
Stove Mounters' International Union.....	24	695
Switchmen's Union of North America.....	4	132
Tailors' Union of America, Journeymen.....	5	70
Teamsters, Chauffeurs, Stablemen and Helpers, International Brotherhood of.....	14	546
Textile Workers of America, United.....	15	1,250
Timberworkers, International Union of.....	11	1,200
Transferrers' Association of America, International Steel Plate.....	1	40
Typographical Union, International.....	1	12
Upholsterers' International Union of America.....	49	5,130
Wireless and Cable Telegraphers, Association of.....	4	250
Workers' International Industrial Union.....	1	52
	1	10

Table 8 gives the number of branches and of members of non-international trade unions operating in Canada at the close of 1921.

**8.—Non-international Trade Unions Operating in Canada.**

NUMBER OF BRANCHES AND NUMBER OF MEMBERS, DECEMBER, 1921.

Name of Organization.	Branches or affiliations.	Member- ship reported.
Trades and Labour Congress of Canada.....	43	5,937
Canadian Federation of Labour.....	32	7,430
Amalgamated Civil Servants of Canada.....	19	800
Brotherhood of Dominion Express Employees.....	25	2,054
Canadian Association of Railway Engineers.....	17	600
Canadian Association of Stationary Engineers.....	12	380
Canadian Brotherhood of Stationary Engineers, Firemen and Helpers.....	3	150
Canadian Brussels Carpet Weavers' Benefit Association.....	4	190
Canadian Federation of Bricklayers, Masons and Plasterers.....	6	822
Canadian Great Lakes Fishermen's Protective Association.....	1	41
Dominion Postal Clerks' Association.....	32	1,800
Dominion Railway Mail Clerks' Federation.....	13	1,123
Federated Association of Letter Carriers.....	37	1,647
National Association of Marine Engineers.....	17	1,426
Saskatchewan Brotherhood of Steam and Operating Engineers.....	3	80

**TRADE DISPUTES.**

Statistics of strikes and lockouts in Canada have been collected and published by the Department of Labour since its inception toward the end of 1901. Table 9 shows the number of disputes, the number of employers and employees involved and the time loss in working days for each year from 1901 to 1921, and the totals for the period. The item in the time loss in working days is calculated by multiplying the number of men directly affected through a strike or lockout by the number of working days they are so affected during the time the firm or establishment is involved. For the year 1921 the number of disputes, the numbers of employers and employees involved were smaller than in the previous year, but the time loss in working days during the year slightly exceeded that for 1920 owing to a number of prolonged disputes, namely, the printers' strike for a 44-hour week beginning about June 1st and to a considerable extent unsettled at the end of the year, the strike in the pulp and paper industry early in the year, and several strikes in the building trades lasting several weeks. In all respects, however, the figures were lower than in 1919, when not only the general strike at Winnipeg and the resulting sympathetic strikes, but also disputes in many industries throughout the Dominion, contributed to cause the greatest time loss on record in Canada, involving also the largest number of employees and of establishments.

The time loss owing to trade disputes since the beginning of the century to the end of 1921 is shown by industries in Table 10, from which it is evident that the time loss during the period has been greatest in the mining industry, followed by the metals, machinery and conveyances industry, which owed its prominence to the great

strike in Winnipeg in 1919. In 1921, however, the industries most disturbed by industrial disputes were the printing and allied trades (higher wages and the 44-hour week), and the building and construction trade (generally against reduction of wages).

Table 11 shows by industries the number of disputes, the number of employees involved and the time loss, the greatest time loss being, as above mentioned, in printing and publishing, in pulp and paper manufacturing and in building and construction, with however considerable time loss in the clothing industry, in food, liquor, and tobacco manufacturing, and in mining. Apart from the printers' strike for the 44-hour week the feature of the year was the number of men who struck against reductions in wages, 16,255 out of 22,930, of whom 11,052 were unsuccessful, while 2,836 secured a compromise. The number of disputes in existence in 1921, with the number of employees involved and the time loss, is shown by months in Table 13, which indicates that in 1921, as ordinarily, the maximum of trade disputes was reached in the early summer—in May and June.

The causes and results of industrial disputes occurring in 1921 are given in Table 12, from which it is evident that the chief struggles of the year resulted from the attempt of the employers to reduce money wages, corresponding with the falling prices of their products, and the resistance of the employees to such reductions—a resistance which was rarely successful since it ignored the current economic trend. Statistics of the methods applied in settling the disputes which occurred during the year are presented in Table 14.

### 9.—Record of Labour Disputes by Years, 1901-1921.

Year.	Number of Disputes.		Disputes in existence in the year.		
	In existence in the year.	Beginning in the year.	Employees involved.	Employees involved.	Time loss in working days.
1901.....	104	104	273	28,086	632,302
1902.....	121	121	420	12,264	120,940
1903.....	146	146	927	50,041	1,226,500
1904.....	99	99	575	16,482	265,004
1905.....	89	88	437	16,223	217,244
1906.....	141	141	1,015	26,050	359,797
1907.....	149	144	825	36,224	621,962
1908.....	68	65	175	25,293	708,285
1909.....	69	69	397	17,332	871,845
1910.....	84	82	1,335	21,280	718,635
1911.....	99	96	475	30,094	2,046,650
1912.....	150	143	989	40,511	1,099,208
1913.....	113	106	1,015	39,536	1,287,678
1914.....	44	40	205	8,678	430,054
1915.....	43	38	96	9,140	106,149
1916.....	75	74	271	21,157	208,277
1917.....	148	141	714	48,329	1,134,970
1918.....	196	191	766	68,489	763,341
1919.....	298	290	1,913	139,988	3,942,189
1920.....	285	272	1,273	52,150	886,754
1921.....	145	138	907	22,930	956,461
<b>Total.....</b>	<b>2,666</b>	<b>2,593</b>	<b>15,003</b>	<b>729,277</b>	<b>18,604,254</b>

WORKING DAYS

4,000,000

WORKING DAYS

4,000,000

TIME LOSS IN WORKING DAYS  
BY INDUSTRIES  
AND TOTAL TIME LOSS  
1901-1921

LEGEND

MINES SMELTERS ETC.

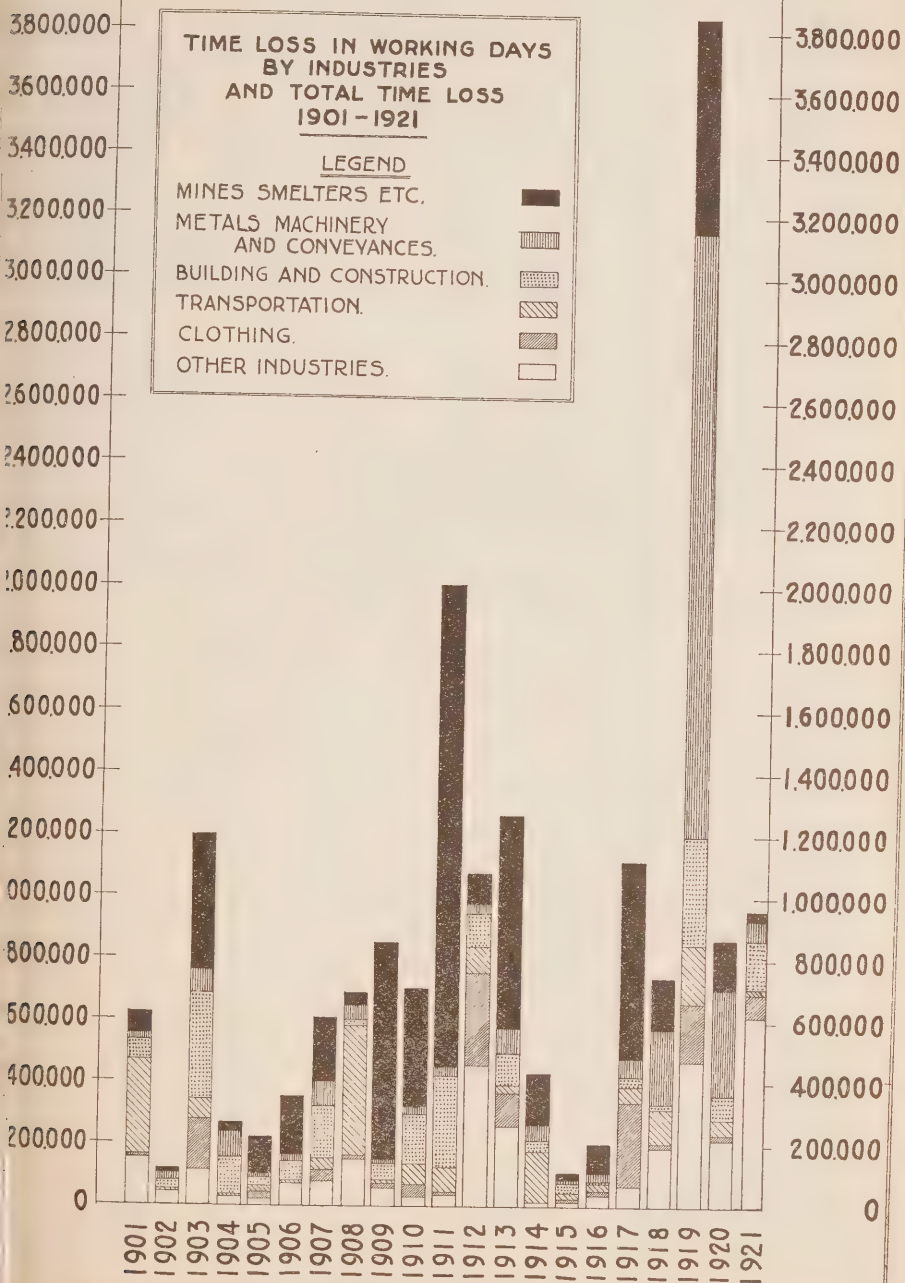
METALS MACHINERY  
AND CONVEYANCES.

BUILDING AND CONSTRUCTION.

TRANSPORTATION.

CLOTHING.

OTHER INDUSTRIES.



NOTE.—The time loss in working days shown for metal trades in 1919 includes also the time loss incurred in sympathy with strikes in the metal trades that year, 851,095 at Winnipeg and approximately 25,000 at O., leaving 1,117,609 days for strikes in the metal trades only.



## 10.—Time Losses by Industries in Working Days, 1901-1921.

Industry.	1901-17.	1918.	1919.	1920.	1921.	Total.
	No.	No.	No.	No.	No.	No.
Fishing.....	253,088	—	—	—	1,400	253,088
Lumbering.....	219,047	29,407	100,785	79,054	9,516	437,809
Mining.....	5,450,401	163,585	714,340	165,509	27,881	6,521,716
Railway, Canal and Har- bour Construction.....	—	—	69,454	3,707	200	73,361
Building and Construction	1,686,277	18,453	287,146	72,878	153,372	2,218,126
Metals, Machinery and Conveyances.....	762,370	229,574	1,993,704 <sup>1</sup>	349,295	65,657	3,400,600
Woodworking.....	106,662	3,432	16,312	24,137	3,076	153,619
Printing and Allied trades	24,969	21,589	32,642	14,116	519,280	612,596
Clothing.....	1,180,795	14,156	189,141	20,520	66,960	1,471,572
Textiles.....	539,598	16,611	210,362	4,673	676	771,920
Foods, Liquors and Tobacco.....	127,547	61,869	56,708	43,695	67,405	357,224
Chemicals and Explosives	—	2,040	1,971	—	—	4,011
Leather.....	19,600	400	320	1,519	17,879	39,718
Transportation.....	1,269,052	114,748	185,400	48,536	19,061	1,636,797
Public Utilities.....	—	28,608	30,716	38,902	—	98,226
Municipal Employment...	—	28,064	2,434	8,448	1,500	40,446
Miscellaneous.....	126,794	30,805	50,754	11,765	2,598	222,716
Unskilled Labour <sup>2</sup> .....	521,631 <sup>2</sup>	—	—	—	—	521,631 <sup>2</sup>
<b>Total working days.....</b>	<b>12,655,509</b>	<b>763,341</b>	<b>3,942,189</b>	<b>886,754</b>	<b>956,461</b>	<b>18,604,254</b>

<sup>1</sup> The time loss in working days shown for metal trades in 1919 includes also the time loss incurred in strikes in sympathy with strikes in the metal trades that year, 851,095 at Winnipeg and approximately 25,000 at Toronto, leaving 1,117,609 days for strikes in the metal trades only.

<sup>2</sup> After 1915 included in other groups.

## 11.—Industrial Disputes, 1921 by Industries.

Industry.	Disputes.		Number involved.	Time loss.	
	Number.	Per cent of total.	Em- ployees.	Working days.	Per cent of total.
Fishing.....	1	.7	100	1,400	.1
Lumbering.....	5	3.4	716	9,516	1.0
Mines, Smelters, Quarries, Clay Pro- ducts, etc.....	13	9.0	2,094	27,881	3.0
Railway, Canal and Harbour Con- struction.....	1	.7	25	200	.0
Building and Construction.....	36	24.8	4,004	153,372	16.0
Metals, Machinery and Conveyances.	19	13.1	1,105	65,657	6.9
Woodworking.....	5	3.4	132	3,076	.4
Pulp and Paper.....	8	5.5	4,257	201,346	21.0
Printing and Publishing.....	16	11.0	2,613	317,934	33.3
Clothing.....	13	9.0	3,033	66,960	7.0
Textiles.....	1	.7	26	676	.0
Foods, Liquors and Tobacco.....	7	4.9	2,452	67,405	7.0
Leather.....	5	3.4	487	17,879	1.9
Transportation:—					
Electric Railway Service.....	2	1.4	305	11,900	1.3
Navigation.....	3	2.0	359	6,556	.7
Miscellaneous Transport.....	2	1.4	190	605	.0
Municipal Employment.....	2	1.4	300	1,500	.1
Miscellaneous.....	6	4.2	732	2,598	.3
<b>Total.....</b>	<b>145</b>	<b>100</b>	<b>22,930</b>	<b>956,461</b>	<b>100</b>

12.—Industrial Disputes, 1921, by Causes and Results.

Cause or object.	In favour of employees.				In favour of employers.				Compromise.				Indefinite or untermin- ated.				Total.			
	No. of disputes.	No. of firms involved.	No. of employees affected.	Time loss in working days.	No. of disputes.	No. of firms involved.	No. of employees affected.	Time loss in working days.	No. of disputes.	No. of firms involved.	No. of employees affected.	Time loss in working days.	No. of disputes.	No. of firms involved.	No. of employees affected.	Time loss in working days.	No. of disputes.	No. of firms involved.	No. of employees affected.	Time loss in working days.
For increased wages.....	2	4	568	1,262	4	6	397	4,641	2	14	243	18,227	1	—	50	3,050	9	24	1,258	27,180
For increased wages and shorter hours.....	1	2	10	160	1	3	12	564	2	3	51	932	4	189	1,839	291,606	8	188	1,912	293,262
For increased wages and other changes.....	5	5	163	1,362	2	4	61	388	—	—	—	—	4	42	579	25,716	11	51	803	27,466
For shorter hours.....	1	5	36	396	—	—	—	—	2	9	89	950	3	49	413	43,113	6	63	538	44,459
Against discharge of employees.....	—	—	—	—	3	3	192	5,304	—	—	—	—	—	—	—	—	3	3	192	5,304
Against employment of particular persons.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Against reduction in wages.....	9	34	927	9,200	48	329	11,052	401,878	26	110	2,836	69,198	4	59	1,440	36,827	87	532	16,255	517,103
For recognition of union.....	1	1	22	352	1	1	48	4,347	1	2	46	874	—	—	—	—	3	4	116	5,573
Against employment of non-unionists.....	2	2	91	238	—	—	—	—	—	—	—	—	—	—	—	—	2	2	91	238
Sympathetic disputes.....	—	—	—	—	1	3	40	120	—	—	—	—	2	2	41	6,993	3	5	81	7,113
Unclassified.....	—	—	—	—	9	17	1,236	5,295	3	17	198	12,228	1	1	250	11,240	13	35	1,684	28,763
<b>Total</b> .....	<b>21</b>	<b>53</b>	<b>1,817</b>	<b>12,970</b>	<b>69</b>	<b>366</b>	<b>13,038</b>	<b>422,537</b>	<b>36</b>	<b>155</b>	<b>3,463</b>	<b>102,409</b>	<b>19</b>	<b>333</b>	<b>4,612</b>	<b>418,545</b>	<b>145</b>	<b>907</b>	<b>22,930</b>	<b>956,461</b>

## 13.—Industrial Disputes by Months, 1921.

Month.	In Existence each Month.	No. of Employees Affected.	Time Loss in Working Days.
January.....	23	1,765	30,646
February.....	31	2,906	36,361
March.....	32	3,468	55,502
April.....	29	4,453	63,480
May.....	56	9,323	175,889
June.....	50	10,239	188,020
July.....	41	9,413	92,891
August.....	31	3,442	73,273
September.....	26	3,948	59,849
October.....	17	1,897	46,036
November.....	18	3,354	73,149
December.....	18	3,759	61,365

## 14.—Industrial Disputes, 1921, by Methods of Settlement.

Industry or occupation.	Negotiations between parties.		Conciliation or mediation.		Arbitration.		Reference to Board under I. D. I. Act.		Returned to work on Employers' terms.	
	Number of disputes.	Number of employees involved.	Number of disputes.	Number of employees involved.	Number of disputes.	Number of employees involved.	Number of disputes.	Number of employees involved.	Number of disputes.	Number of employees involved.
Fishing.....	—	—	—	—	—	—	—	—	1	100
Lumbering.....	1	450	—	—	—	—	—	—	3	206
Mines, smelters, quarries, clay products, etc.....	9	1,626	2	281	1	37	—	—	—	—
Railway, canal and harbour construction.....	—	—	—	—	1	25	—	—	—	—
Building and construction.....	19	1,184	8	2,110	4	163	—	—	1	17
Metals, machinery and conveyances.....	12	244	—	—	—	—	—	—	3	655
Woodworking.....	1	20	2	54	—	—	—	—	—	—
Pulp and paper.....	—	—	—	—	6	3,938	—	—	1	219
Printing and publishing.....	4	158	—	—	1	78	—	—	—	—
Clothing.....	6	1,614	1	30	—	—	—	—	2	58
Textiles.....	1	26	—	—	—	—	—	—	—	—
Foods, liquors and tobacco.....	—	—	1	200	1	22	—	—	4	2,182
Leather.....	2	435	—	—	—	—	—	—	1	21
Transportation:—										
Electric railway service.....	—	—	—	—	—	—	1	55	—	—
Navigation.....	1	200	1	71	1	88	—	—	—	—
Miscellaneous transport.....	1	100	1	90	—	—	—	—	—	—
Municipal employment.....	—	—	—	—	—	—	—	—	2	300
Miscellaneous.....	3	595	2	45	—	—	—	—	1	92
<b>Total.....</b>	<b>60</b>	<b>6,652</b>	<b>18</b>	<b>2,881</b>	<b>15</b>	<b>4,351</b>	<b>1</b>	<b>55</b>	<b>19</b>	<b>3,850</b>

## 14.—Industrial Disputes, 1921, by Methods of Settlement—concluded.

Industry or Occupation.	Replacement of strikers.		Otherwise (including indefinite or un-terminated).		Total.	
	Number of disputes.	Number of employees involved.	Number of disputes.	Number of employees involved.	Number of disputes.	Number of employees involved.
Fishing.....	—	—	—	—	1	100
Lumbering.....	1	60	—	—	5	716
Mines, smelters, quarries, clay products etc.....	—	—	—	—	13	2,094
Railway, canal and harbour construction.....	—	—	1	150	1	25
Building and construction.....	2	340	2	190	36	4,004
Metals, machinery and conveyances.....	1	15	3	191	19	1,105
Woodworking.....	2	58	—	—	5	132
Pulp and paper.....	1	100	—	—	8	4,257
Printing and publishing.....	1	12	10	2,365	16	2,613
Clothing.....	2	31	2	1,300	13	3,033
Textiles.....	—	—	—	—	1	26
Foods, liquors and tobacco.....	—	—	1	48	7	2,452
Leather.....	2	31	—	—	5	487
Transportation:—	—	—	—	—	—	—
Electric railway service.....	—	—	1	250	2	305
Navigation.....	—	—	—	—	3	350
Miscellaneous transport.....	—	—	—	—	2	190
Municipal employment.....	—	—	—	—	2	300
Miscellaneous.....	—	—	—	—	6	732
<b>Total.....</b>	<b>12</b>	<b>647</b>	<b>20</b>	<b>4,494</b>	<b>145</b>	<b>22,930</b>

## EMPLOYMENT AND UNEMPLOYMENT.

**Employment Service of Canada.**—The Employment Offices Co-ordination Act, (8-9 Geo. V, c. 2), empowering the Minister of Labour to aid and encourage the organization and co-ordination of public employment offices throughout Canada in order to establish a Dominion-wide Employment Service, was passed in May 1918. At that time there were only twelve provincial employment offices in the Dominion but at the close of the year fifteen offices were in operation and by the end of 1919 the number had increased to ninety-two. As the demobilization period came to a close the number of offices decreased and at the end of the year 1921 there were 76 offices, distributed among the provinces as follows:—Nova Scotia, 4; New Brunswick, 2; Quebec, 5; Ontario, 26; Manitoba, 9; Saskatchewan, 9; Alberta, 7; British Columbia, 14.

Under the Employment Offices Co-ordination Act sums aggregating \$50,000 in 1918-19, \$100,000 in 1919-1920 and \$150,000 in subsequent years, (amounts afterwards increased), were appropriated to be paid to the Provincial Governments in proportion to their expenditure on employment offices, to assist them in organizing and extending their services. Subventions were made conditional upon an agreement between the Minister of Labour and the Provincial



Governments as to the terms, conditions and purposes upon and for which payments should be made. During 1921 agreements were completed with all the provinces except New Brunswick and Prince Edward Island. Agreements were also made during the year with the municipalities of Moncton and Chatham, in accordance with an amendment to the Act passed in 1920. The agreement requires that in the operation of the employment offices the provinces shall endeavour to fill situations in all trades and occupations for both men and women and that no charge shall be made to employers or employees for this service. Each province agrees to maintain a provincial clearance system in co-operation with the interprovincial clearance system established by the Dominion Government; to organize in connection with the Employment Service of the province a provincial advisory council, and in every city of the province with a population of 25,000 or more in which an employment office is established, a local advisory council, representing equally employers and employees, to assist in the administration of the employment offices.

Regulations issued under authority of the Act in December, 1918, in addition to authorizing Provincial and Local Advisory Councils, provided for the establishment of the Employment Service Council of Canada, to advise the Minister of Labour in the administration of the Act and to recommend ways of preventing unemployment. This body is composed of representatives of the Dominion and Provincial Governments, the Canadian Manufacturers' Association, the Association of Canadian Building and Construction Industries, the Trades and Labour Congress of Canada, the Railway Association of Canada, the Canadian Railway Brotherhoods, the Canadian Lumbermen's Association, the Canadian Council of Agriculture and the Great War Veterans' Association. It has held three meetings, the first in May, 1919, the second in September, 1920, and the third August 31-September 2, 1921, at which plans for developing the work of the Employment Service and for preventing unemployment were discussed and recommendations presenting the views of the Council were adopted.

During the year 1921, the applications for employment received at the various local offices of the Employment Service totalled 530,872, of which 434,590 were for men and 96,282 for women. The vacancies reported during the same period numbered 420,024, of which 321,402 were for men and 98,622 for women. During the year 280,518 placements were made in regular employment, of which 245,246 were of men and 35,272 of women, and also 7,523 placements in casual employment.

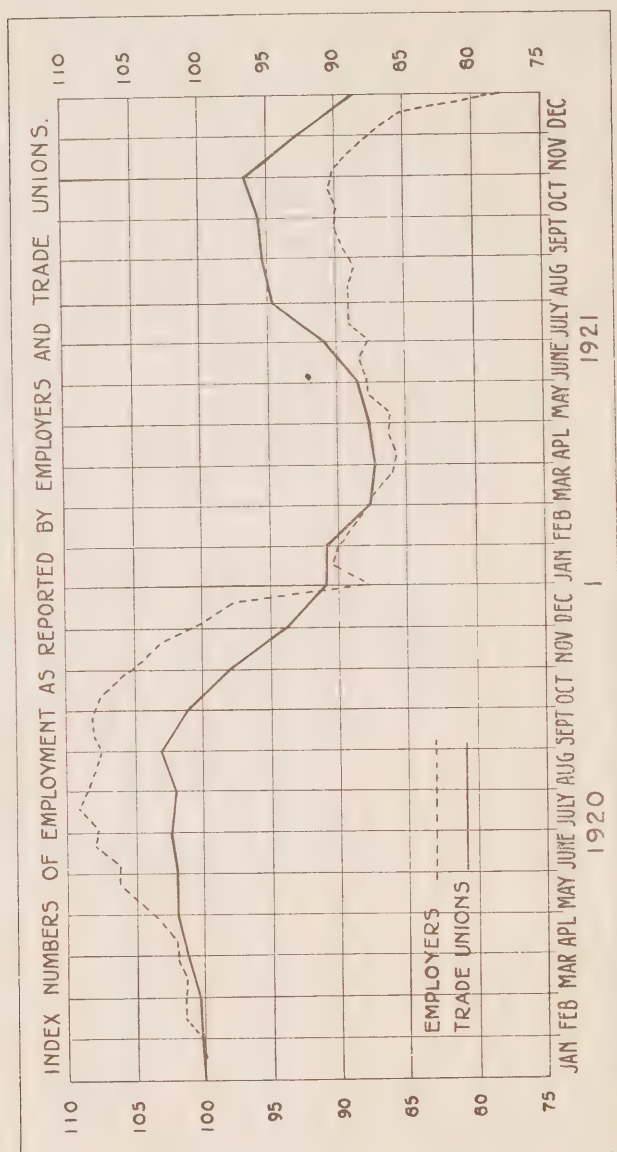
A special transportation rate for persons sent by the Service to employment at a distance has been granted by the principal railways. This rate, applying only in cases of *bona fide* placements through the Employment Service, was granted during the year 1921 to 37,445 persons, of whom 23,536 were going to points in the same province as the dispatching provinces and 13,909 to points in other provinces.

During the fiscal year 1919-20 an arrangement was put into effect with regard to the admission of workers from Great Britain to fill vacancies which cannot be filled in Canada. This plan, which involves close co-operation between the Immigration Department and the Employment Service and between the Employment Service of Canada and the British Employment Exchanges, proved on the whole very satisfactory and continued in force during 1921. A procedure has been adopted which as far as possible obviates delay and at the same time insures that workers shall not be brought into the country before every effort has been made to secure the required help in Canada and the authorities have had an opportunity of deciding whether prevailing conditions warrant the importation of the required labour.

Data covering the field of employment are collected and compiled under authority of the Employment Offices Co-ordination Act. For this purpose five principal sources of information were used during 1921: reports from employers, trade union reports, employment office reports, reports on civic employment and reports on building permits. The returns received and tabulated during the year showed that while in 1920 employment remained at a high level until autumn, the volume of employment in 1921 was at a low ebb throughout the whole year, the highest level attained being considerably lower than the peak in 1920, and only slightly above the lowest level of the latter year.

The reports from employers and trade unions are on the whole the best indices of employment. The former are received weekly from some 5,200 employers employing about 600,000 persons, and the latter monthly from some 1,500 unions with a combined membership of over 160,000. As shown in the accompanying chart, returns from these two sources agree in indicating a continuation until the 1st of April 1921, of the marked contraction in employment which commenced in October 1920. From the spring of 1921 until late in October, employment expanded fairly steadily, but in the following month the autumn and winter contraction in industry set in, causing the curve of employment to decline rapidly, so that at the end of the year it stood at a very low level.

INDEX NUMBERS OF EMPLOYMENT, 1920 AND 1921.



For the curve of employment as reported by employers, the number of employees reported as at work on Jan. 17, 1920, is taken as 100.

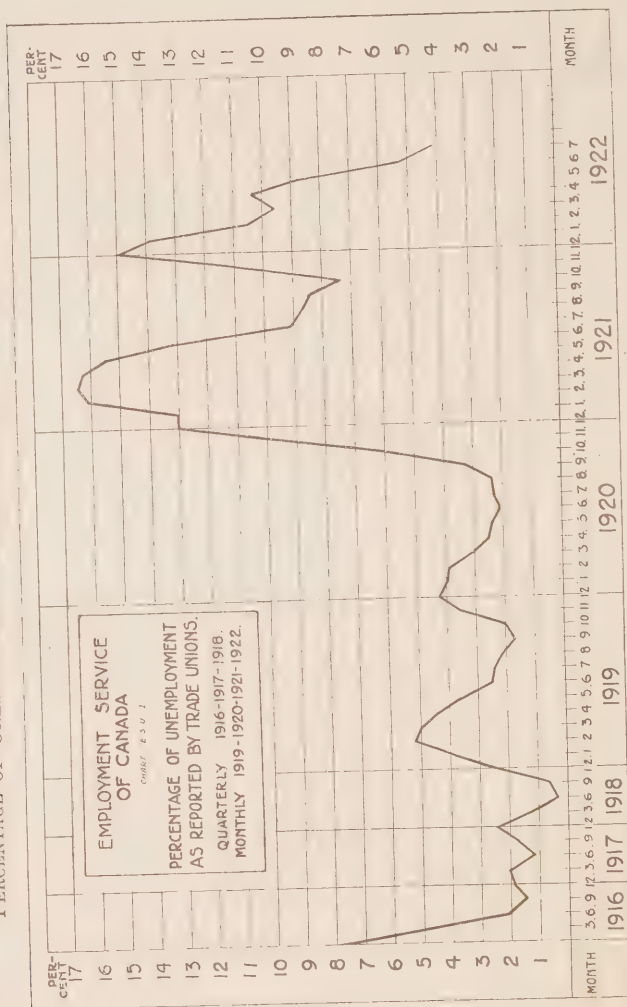
For the curve of employment as reported by trade unions, the percentage of trade unionists reported as at work on Jan. 1, 1920, viz., 96.02 p.c., is taken as 100

## 15.—Percentages by Provinces of Unemployment in Trades Unions, 1915-1921.

Month.	Year.	Nova Scotia and Prince Edward Island.	New Brunsw- wick.	Quebec.	On- tario.	Man- itoba.	Sas- kat- chewan.	Alberta	British Col- umbia.	Canada.
December.....	1915	·20	·7	9·54	8·1	3·2	7·0	4·33	14·79	7·93
June.....	1916	·49	·85	1·83	1·67	1·2	2·6	3·03	5·80	2·13
December.....	1916	·29	·23	3·70	1·56	1·01	1·63	1·70	2·43	1·96
June.....	1917	·25	·22	2·50	·94	·58	·25	·84	1·80	1·20
December.....	1917	2·64	4·14	3·19	2·45	1·07	2·41	1·55	3·18	2·56
June.....	1918	1·17	·27	·45	·37	·29	·18	·39	·92	·41
December.....	1918	2·02	·42	2·17	2·92	1·31	2·15	2·07	4·02	2·51
January.....	1919	1·25	·84	3·93	4·58	3·62	5·73	1·97	5·05	3·87
February.....	1919	5·68	2·73	4·92	5·50	2·82	4·47	4·16	7·79	5·23
March.....	1919	2·18	2·97	3·90	6·67	1·20	5·31	3·56	8·22	5·00
April.....	1919	2·41	2·46	4·39	4·27	1·65	3·95	2·26	10·07	4·44
May.....	1919	4·66	3·38	5·26	2·61	1·47	2·86	1·43	4·92	3·63
June.....	1919	2·69	2·43	4·00	1·81	1·19	2·51	1·68	3·37	2·58
July.....	1919	4·13	1·48	2·54	1·52	·92	2·77	1·90	5·82	2·43
August.....	1919	5·44	1·53	2·72	1·26	·81	1·95	1·09	4·06	2·19
September.....	1919	1·53	1·09	2·28	1·42	·73	1·29	·94	3·98	1·79
October.....	1919	3·19	1·37	2·50	·81	1·28	·59	·93	5·02	2·03
November.....	1919	1·21	1·57	2·88	2·04	2·07	1·20	·52	17·06	3·58
December.....	1919	1·47	2·02	3·20	1·90	4·97	6·01	2·79	18·62	4·29
January.....	1920	2·72	3·97	3·41	2·66	4·50	4·92	4·01	11·78	4·02
February.....	1920	5·08	2·37	2·31	2·91	4·62	5·24	5·12	10·21	3·96
March.....	1920	1·88	3·06	3·25	2·34	3·18	4·03	2·06	7·60	3·13
April.....	1920	·61	1·03	2·56	2·27	2·71	3·19	1·71	6·01	2·52
May.....	1920	·38	·53	3·96	1·70	2·63	1·32	1·49	5·57	2·40
June.....	1920	·56	·40	3·05	1·60	1·41	2·15	1·15	5·81	2·14
July.....	1920	·10	·20	2·85	1·51	1·33	·89	1·43	9·25	2·35
August.....	1920	·26	1·02	4·50	1·73	·31	·53	·67	4·66	2·37
September.....	1920	·25	·10	7·59	1·89	·49	·14	·55	5·09	3·26
October.....	1920	·34	·42	9·54	3·01	3·34	·34	·83	15·65	6·09
November.....	1920	2·21	·45	14·73	6·39	4·32	4·13	3·62	24·70	10·24
December.....	1920	6·90	11·00	19·57	12·29	7·76	10·13	9·24	11·59	13·05
January.....	1921	5·85	8·11	13·27	14·16	8·81	10·09	9·72	21·56	13·07
February.....	1921	14·35	7·30	10·72	14·76	9·85	12·07	10·34	42·08	16·12
March.....	1921	17·88	11·68	16·88	12·95	10·54	12·07	9·77	34·59	16·48
April.....	1921	21·56	12·44	20·70	11·91	11·07	12·83	12·67	25·67	16·27
May.....	1921	12·85	6·22	26·54	9·14	10·39	9·38	11·96	21·67	15·46
June.....	1921	14·26	11·66	20·70	6·74	7·96	6·81	9·37	24·44	13·15
July.....	1921	12·23	10·86	8·68	7·83	6·61	4·85	6·26	16·72	9·10
August.....	1921	7·39	8·34	11·48	8·01	3·54	3·08	4·76	12·73	8·71
September.....	1921	8·68	6·99	13·80	6·22	3·92	2·51	2·98	12·48	8·47
October.....	1921	2·76	5·63	10·66	5·73	4·16	3·26	4·03	14·81	7·42
November.....	1921	6·92	5·73	20·81	6·05	8·47	5·49	5·89	18·04	11·06
December.....	1921	5·90	6·91	26·83	9·66	15·51	10·41	6·79	24·70	15·09



PERCENTAGE OF UNEMPLOYMENT AMONG TRADE UNIONISTS, 1916-JULY, 1922.



16.—Percentages of Unemployment in Trade Unions by Groups of Industries, 1915-1922

Month.	Year.	Manufacturing and Mechanical Industries.	Metals, Machinery and Conveyances.	Food, Tobacco and Liquors.	Textiles, Carpets and Liqueurs.	Clothing.	Pulp, Paper and Fibre.	Printing, Publishing and Paper Goods.	Woodworking and Furniture.	Leather, Boots, Shoes, and Rubber.	Glass Bottle Blowing.	Jewelry Working.	Oil Refining.	Transportation.	Steam Railways.	Street and Electric Railways.	Navigation.	Terminals and Diving.	Mining, Quarrying and Hauling of Ores.	Building and Construction.	Public Employment.	Fishing.	Lumbering and Logging.	Miscellaneous.	All Occupations.	
December	1915	8.1	0	4.9	0	3.3	0	3.7	3.7	0	0	0	0	2.45	2.4	2.16	16.59	0	5.6	5.6	0	0	23.3	8.4	7.92	
January	1916	1.1	0	1.2	0	0.6	0	5.9	5.9	0	0	0	0	2.45	2.4	2.16	16.59	0	5.6	5.6	0	0	23.3	8.4	7.92	
February	1916	2.3	7.1	1.2	0	6.48	0	3.7	3.7	0	0	0	0	1.06	6.2	6.2	48.99	0	6.2	6.2	0	0	23.3	8.4	7.92	
March	1917	1.9	7.9	1.56	0	4.95	0	6.2	6.2	4.33	3.56	0	0	3.32	3.3	3.3	48.99	0	3.3	3.3	0	0	23.3	8.4	7.92	
April	1917	2.7	7.6	3.20	0	11.21	0	3.4	3.4	2.92	4.48	0	0	3.32	3.3	3.3	48.99	0	3.3	3.3	0	0	23.3	8.4	7.92	
May	1918	4.2	1.1	1.78	0	0.5	0	2.20	2.20	0	0	0	0	2.20	2.2	2.2	8.7	0	2.2	2.2	0	0	23.3	8.4	7.92	
June	1918	4.2	1.1	1.78	0	0.5	0	2.20	2.20	0	0	0	0	2.20	2.2	2.2	8.7	0	2.2	2.2	0	0	23.3	8.4	7.92	
July	1918	4.2	1.1	1.78	0	0.5	0	2.20	2.20	0	0	0	0	2.20	2.2	2.2	8.7	0	2.2	2.2	0	0	23.3	8.4	7.92	
August	1918	3.89	3.53	8.63	1.41	3.32	4.3	8.6	0.57	1.33	8.2	0	0	7.1	1.33	1.33	0.6	4.41	0.5	1.33	1.33	0	0	23.3	8.4	7.92
September	1919	3.32	3.21	8.24	11.50	3.22	2.23	6.01	0.57	1.33	8.2	0	0	7.1	1.33	1.33	0.6	4.41	0.5	1.33	1.33	0	0	23.3	8.4	7.92
October	1919	3.32	3.21	8.24	11.50	3.22	2.23	6.01	0.57	1.33	8.2	0	0	7.1	1.33	1.33	0.6	4.41	0.5	1.33	1.33	0	0	23.3	8.4	7.92
November	1919	4.18	5.51	6.79	9.90	2.97	4.96	7.9	2.21	1.33	0.61	8.8	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92
December	1919	4.18	5.51	6.79	9.90	2.97	3.96	5.9	2.21	1.33	0.61	8.8	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92
January	1919	3.47	4.26	4.06	2.94	0	7.9	5.0	1.01	0.6	1.33	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
February	1919	4.05	7.27	3.82	3.32	7.3	1.17	4.0	1.01	0.6	1.33	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
March	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
April	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
May	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
June	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
July	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
August	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
September	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
October	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
November	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
December	1919	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
January	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
February	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
March	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
April	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
May	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
June	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
July	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
August	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
September	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
October	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
November	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
December	1920	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
January	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
February	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
March	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
April	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
May	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
June	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
July	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
August	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
September	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
October	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
November	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	
December	1921	3.46	4.69	1.90	1.91	3.2	1.61	1.01	4.08	0	0	0	0	3.32	2.87	3.32	12.09	2.63	3.32	3.32	0	0	23.3	8.4	7.92	

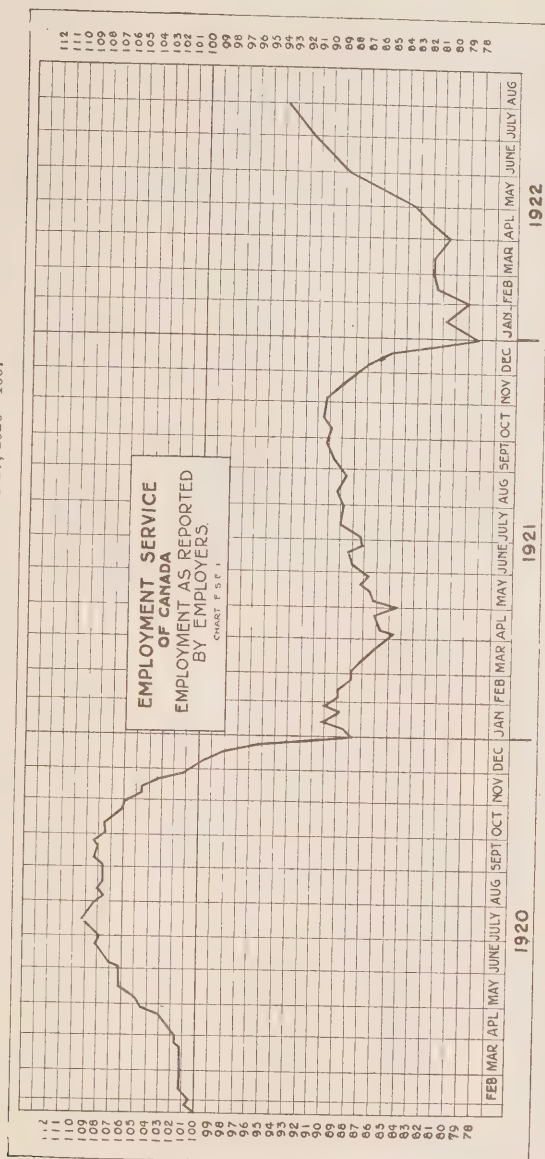
17.—Index Numbers of Employment as Reported by Employers During 1921.

Industry.	1921.											
	Jan. 17.	Jan. 15.	Feb. 12.	Mar. 12.	Apr. 16.	May 14.	June 18.	July 16.	Aug. 13.	Sept. 10.	Oct. 22.	Nov. 19.
100	100	100	100	100	100	100	100	100	100	100	100	100
Manufacturing.....	84.2	84.6	84.7	83.1	82.8	82.7	82.3	80.7	80.8	81.3	80.3	78.4
Animal products—edible.....	87.5	80.1	79.8	86.5	94.5	98.5	96.3	94.9	93.5	89.3	89.7	85.9
Fur and its products.....	100	80.4	85.9	73.0	85.7	87.1	83.3	85.1	98.6	102.0	104.8	102.8
Leather and its products.....	100	61.2	71.4	75.2	72.2	76.7	77.6	79.5	78.3	84.9	87.8	85.6
Lumber and its products.....	100	67.3	67.2	73.3	97.2	103.6	106.2	97.0	92.1	88.7	82.2	73.4
Plant products—edible.....	100	81.8	86.3	83.7	83.4	85.4	94.3	96.3	105.6	100.1	99.8	93.7
Pulp and paper products.....	100	101.3	98.9	93.6	92.7	91.4	91.6	90.2	87.1	88.5	88.0	85.9
Rubber products.....	100	59.6	68.9	67.3	68.4	69.5	76.0	59.1	63.3	69.5	69.3	68.5
Textile products.....	100	78.6	81.1	82.4	81.7	79.3	77.0	78.7	82.6	86.0	85.9	80.1
Wood distillates and extracts.....	100	74.7	84.7	78.3	87.2	88.7	90.1	89.7	86.5	75.2	76.3	86.8
Clay, glass and stone products.....	100	80.0	87.4	84.3	83.5	84.1	91.6	88.1	84.7	82.7	82.2	79.5
Iron and steel products.....	100	89.2	88.5	87.7	78.2	73.7	72.4	70.2	69.9	70.5	69.2	72.2
Non-ferrous metal products.....	100	76.8	76.3	73.2	66.6	66.6	65.8	64.9	63.0	62.6	63.3	58.7
Mineral products.....	100	102.0	93.4	95.1	88.7	86.9	87.2	89.6	88.4	90.0	87.6	84.3
Musical instruments <sup>1</sup> .....	100	—	—	—	67.1	67.1	65.2	61.4	58.5	65.6	66.4	58.0
Tobacco and distilled and malt liquors <sup>1</sup> .....	100	—	—	—	95.6	97.5	105.2	102.5	98.3	98.5	100.4	97.9
Chemical products <sup>1</sup> .....	100	—	—	—	82.1	82.3	81.4	81.6	82.7	83.8	84.8	82.1
Electrical current <sup>1</sup> .....	100	—	—	—	101.1	103.6	110.3	107.3	107.6	106.3	106.3	106.9
Electrical apparatus <sup>1</sup> .....	100	—	—	—	96.7	93.2	84.8	77.7	79.3	74.6	73.1	70.9
Miscellaneous.....	100	85.9	95.4	90.5	89.6	94.1	92.9	103.8	98.2	80.2	84.4	82.9
Logging.....	100	89.0	85.4	62.9	48.0	43.4	30.0	32.8	36.1	54.2	60.0	61.4
Mining.....	100	98.1	94.5	92.4	86.6	85.6	80.0	92.0	94.7	95.7	98.6	93.0
Coal.....	100	103.4	97.9	95.9	87.3	82.9	84.0	99.1	101.4	103.6	105.5	99.4
Non-metallic minerals.....	100	132.6	94.7	77.0	80.3	82.2	81.6	88.1	85.2	86.3	86.4	86.5
Metallic ores.....	100	104.8	94.7	90.5	85.1	89.4	89.4	84.3	83.5	83.4	81.1	76.3
Communications.....	100	104.9	99.4	102.8	105.4	106.0	107.6	106.3	105.8	104.9	103.9	103.5
Telegraphs.....	100	104.9	99.4	94.7	93.6	94.9	97.6	98.3	98.0	104.7	105.4	101.4
Telephones.....	100	105.2	104.9	105.1	105.0	108.3	109.0	108.5	107.7	105.0	103.5	104.1
Transportation.....	100	102.3	99.0	95.1	98.2	100.0	102.3	104.0	106.4	110.7	108.0	99.2
Street railway and carriage.....	100	104.8	102.1	101.6	105.7	104.3	109.8	107.9	108.4	124.0	118.2	114.6
Railways.....	100	103.9	97.3	92.8	91.5	91.9	95.1	96.1	97.9	98.7	98.7	95.6
Shipping and stevedoring.....	100	117.6	117.3	113.6	116.0	176.0	182.1	201.5	209.2	198.6	202.3	135.9
Construction and maintenance.....	100	103.0	95.9	86.2	91.5	102.7	122.3	142.5	146.3	143.2	128.1	92.4
Building.....	100	115.8	102.9	100.6	100.4	114.8	120.3	158.1	144.5	139.4	136.2	75.2
Highway.....	100	98.5	93.5	81.4	88.5	98.9	123.1	136.1	140.8	144.8	124.2	2047.8
Railroad.....	100	97.3	94.3	96.4	98.4	98.4	103.9	109.9	108.2	97.6	95.1	90.5
Service.....	100	95.3	92.6	95.5	97.0	97.7	110.1	123.3	120.2	96.0	94.0	92.9
Hotel and restaurant.....	100	77.0	78.5	79.9	79.6	80.7	79.4	73.0	83.3	95.4	86.3	80.2
Professional.....	100	101.4	98.4	99.4	101.7	99.5	100.0	99.7	97.5	97.5	97.0	93.8
Personal (chiefly laundries).....	100	93.8	92.6	92.4	93.2	92.8	93.7	91.2	92.9	93.1	94.9	96.9
Trade.....	100	89.7	88.5	89.0	90.7	89.7	89.6	88.7	89.8	89.8	93.4	97.3
Retail.....	100	89.7	88.5	89.0	90.7	89.7	89.6	88.7	89.8	89.8	93.4	97.3
Wholesale.....	100	101.2	100.5	98.8	99.7	96.3	99.2	98.4	98.8	99.5	97.6	96.2
All Industries.....	100	90.4	89.0	87.1	85.9	86.5	88.3	89.0	89.6	90.4	88.8	85.2
77.9												

NOTE.—Number of employees on January 17, 1920=100. <sup>1</sup>Included in miscellaneous prior to May, 1921.

## INDEX NUMBERS OF EMPLOYMENT AS REPORTED BY EMPLOYERS, JAN., 1920-JULY, 1922.

NUMBER OF EMPLOYEES ON JANUARY 17, 1920=100.



The curve is based on the number of employees actually at work on the last day of each month as reported by the firms making returns in comparison with the number of employees reported by the same firms on January 17, 1920.



**WAGES.**

Statistics of wages and hours of labour have been compiled for recent years by the Department of Labour, the records in some cases going back to 1900. To indicate the general movement of wage rates, index numbers have been calculated from the hourly and weekly rates. For 21 classes of labour in 13 cities, index numbers were calculated from published statistics back to 1901 and for common labour in factories, for a number of miscellaneous factory trades and also in lumbering back to 1911, hourly rates only being included in the calculation up to 1921. Index numbers of wages in coal mines have also been published for the three principal districts from 1900 to 1921, those for the years 1911 to 1921 being included here.

The accompanying table summarizes these index numbers and shows the downward movement during 1921 in the groups covered, the greatest decreases appearing in lumbering and sawmilling, amounting in some cases to 33 per cent.

Early in the year reductions in wages were made in many of the factories throughout Canada, some of which had closed down toward the end of 1920 or early in 1921 and reopened with wages on a lower scale. In some cases reductions were as great as 15 and 20 p.c., but in other cases were only 5 or 10 p.c., while successive reductions of 5 or 10 p.c. occurred in other instances. In the spring there was a fairly general reduction in wages in the building trades, amounting in many cases to 10 cents per hour. In the metal trades, reductions varied considerably, but averaged about 10 cents per hour. In the printing trades, the agreements of the unions with the job printing proprietors expired in many cases and in the new agreements reductions in the working hours from 48 to 44 per week were provided for in some cases, the weekly rates of wages being also reduced in some cases while in others increases occurred. Substantial increases in hourly rates therefore appeared. Owing, however, to strikes in these trades for the 44-hour week in many cities, conditions were unsettled during the last seven months of the year. In railway work, there were decreases averaging 12 p.c. for all classes, but ranging from 5 p.c. to 17 or 18 p.c. Coal miners in the various districts in Canada had received increases in wages in the closing months of 1920 and these rates continued through 1921 except in Vancouver island mines, where reductions according to calculations of changes in the cost of living in that mining district amounted to nearly \$1 per day. In some of the smaller coal mines in Alberta wages were reduced about 15 p.c. and in New Brunswick 12½ p.c. In metal mining, decreases were between 15 and 25 p.c. In smelters wages were similarly reduced. In the pulp and paper industry there was a general decrease in the summer of 1921, ranging in the different trades from 10 to 20 p.c. according to the trades involved, following a strike and the award of an arbitration board, the finding of which was applicable to many mills in Canada as well as in the United States.

## 13.—Index Numbers of Rates of Wages for 21 Classes in 13 Cities of Canada, 1901-1921.

Rates in 1913=100.

Year.	Building Trades 7 classes.		Metal Trades 5 classes.		Printing Trades 2 classes.		Street Railways 1 class.		Steam Rail- ways 6 classes	Average for	
	Weekly rates.	Hourly rates.	Weekly rates.	Hourly rates.	Weekly rates.	Hourly rates.	Weekly rates.	Hourly rates.	Rates. <sup>1</sup>	15 classes <sup>2</sup> .	21 classes <sup>3</sup> .
										Weekly rates.	Hourly rates.
1901.....	69.3	60.3	72.8	68.6	66.6	60.0	65.7	64.0	70.8	69.8	64.9
1902.....	73.2	64.2	74.2	70.2	68.3	61.6	70.0	68.0	73.6	72.7	67.8
1903.....	74.6	67.4	76.2	73.3	69.0	62.6	72.1	71.1	76.7	74.2	70.7
1904.....	76.3	69.7	78.9	75.9	72.3	66.1	74.0	73.1	78.6	76.4	73.1
1905.....	78.6	73.0	81.3	78.6	74.2	68.5	74.4	73.5	78.9	78.6	75.3
1906.....	81.7	76.9	82.4	79.8	75.8	72.2	76.7	75.7	80.2	80.8	77.9
1907.....	84.8	80.2	85.0	82.4	79.3	78.4	82.2	81.4	85.5	83.9	81.9
1908.....	85.9	81.5	87.3	84.7	81.5	80.5	82.5	81.8	86.7	85.5	83.3
1909.....	87.3	83.1	88.6	86.2	83.8	83.4	81.5	81.1	86.7	86.9	84.5
1910.....	90.0	86.9	89.5	88.8	88.2	87.8	86.5	85.7	91.2	89.4	88.4
1911.....	92.6	90.2	92.2	91.0	91.8	91.6	88.1	88.1	96.4	92.1	91.2
1912.....	97.4	96.0	95.9	95.3	96.0	96.0	92.3	92.3	98.3	96.4	96.2
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914.....	100.3	100.8	100.4	100.5	102.4	102.4	100.6	101.0	101.7	100.6	101.1
1915.....	100.5	101.5	101.2	101.5	103.6	103.6	97.4	97.8	101.7	101.0	101.6
1916.....	101.5	102.4	110.4	106.9	105.8	105.8	102.5	102.2	104.9	110.3	105.2
1917.....	108.8	109.9	124.0	128.0	111.3	111.3	115.1	114.6	110.1	114.5	114.8
1918.....	123.8	125.9	146.7	155.2	123.7	123.7	130.3	142.9	133.2	131.6	135.1
1919.....	142.9	148.2	165.3	180.1	145.5	145.9	150.5	163.3	154.2	151.0	158.0
1920.....	171.9	180.9	189.3	209.4	181.7	184.0	179.1	194.2	186.6	179.3	190.3
1921.....	164.0	170.5	166.2	186.8	188.3	193.3	177.9	192.1	165.3	168.8	176.5

<sup>1</sup>Per mile, day, etc.<sup>2</sup>Does not include railway classes.<sup>3</sup>Includes index numbers of mileage rates, etc., on steam railways.

## 19.—Index Numbers of Sample Rates of Wages for Common Labour in Factories, Miscellaneous Factory Trades, and Lumbering, and of Wages in Coal Mines, 1911-1921.

Rates in 1913=100.

Year.	Common Labour in Factories: 35 Samples (1).	Miscellaneous Factory Trades: 72 Samples (1).	Lumbering: 15 Samples (1).	Coal Mining (2).
	Hourly rates.	Hourly rates.	Hourly rates.	Daily wages.
1911.....	94.9	95.4	96.3	97.5
1912.....	98.1	97.1	98.8	98.3
1913.....	100.0	100.0	100.0	100.0
1914.....	101.0	103.2	94.7	101.9
1915.....	101.0	106.2	89.1	102.3
1916.....	110.4	115.1	109.5	111.7
1917.....	129.2	128.0	130.2	130.8
1918.....	152.3	146.8	150.5	157.8
1919.....	180.2	180.2	169.8	170.5
1920.....	215.3	216.8	202.7	197.7
1921.....	190.6	202.0	152.6	208.3

(1) Index numbers for 1921 calculated by reducing those for 1920 by the extent of the average decrease per cent in each group from 1920 to 1921, shown by the samples available for both 1920 and 1921 as follows:—Common labour in factories, 65 samples, miscellaneous factory trades, 257 samples, lumbering, 46 samples. (2) Calculated from three classes of miners on day wages and average earnings per day for contract miners in representative mines in the three important coal mining districts, Nova Scotia, southern Alberta and eastern British Columbia and the Vancouver island field.

20.—Rates of Wages and Hours of Labour of Employees of Steam Railways in Canada, September, 1920, and September, 1921.<sup>1</sup>

Occupation.	Unit.	September, 1920.		September, 1921.		Occupation.	Unit.	September, 1920.		September, 1921.	
		Wages.	Hours per week.	Wages.	Hours per week.			Wages.	Hours per week.	Wages.	Hours per week.
		\$		\$				\$		\$	
Conductors, passenger.....	100 miles	4-67	2	4-27	2	MAINTENANCE OF WAY—					
Conductors, freight (irreg.)...	100 miles	6-44	3	5-80	3	Foremen.....	Day	5-30	48	4-50	48
Brakemen, passenger.....	100 miles	3-33	2	2-03	2	Sectionmen.....	Day	3-88	48	3-20	48
Brakemen, freight (irreg.).....	100 miles	5-12	3	4-43	3						
Baggagemen, passenger.....	100 miles	3-44	2	3-04	2	CAR AND SHOP TRADES—					
Engineers, passenger.....	100 miles	6-48	3	6-00	3	Blacksmiths.....	Hour	.85	44	.77	44
Engineers, freight (irreg.).....	100 miles	7-28	3	6-04	3	Boilermakers.....	Hour	.85	44	.77	44
Firemen, passenger.....	100 miles	4-96	2	4-43	2	Machinists.....	Hour	.85	44	.77	44
Firemen, freight (irreg.).....	100 miles	5-52	3	4-88	3	Moulders.....	Hour	.80	44	.72	44
Despatchers.....	Month	247.00-255.00	48	231.00-239.00	48	Carpenters.....	Hour	.80	44	.72	44
Telegraphers.....	Month	130.00-141.00	48	113.00-120.00	48	Painters.....	Hour	.80	44	.72	44
						Repairs.....	Hour	.50	44	.42	44
						Cleaners.....	Hour		44		44

<sup>1</sup>Rates for running trades and despatchers and telegraphers in British Columbia are slightly higher than above. Where ranges are shown for despatchers and telegraphers the lower rate is that paid east of Fort William, and the higher rate is that paid west of Fort William to British Columbia. <sup>2</sup>Basis of 20 miles per hour. <sup>3</sup>Basis of 12½ miles per hour.

21.—Wages and Hours of Labour of Employees in and about Coal Mines in Canada, September, 1920, and September, 1921.

Occupation.	Unit.	September, 1920.		September, 1921.		Occupation.	Unit.	September, 1920.		September, 1921.	
		Wages.	Hours <sup>6</sup> per day.	Wages.	Hours <sup>3</sup> per day.			Wages.	Hours <sup>6</sup> per day.	Wages.	Hours <sup>3</sup> per day.
NOVA SCOTIA—											
Contract miners <sup>1</sup> .....	Day	6.55 <sup>4</sup>	8		8	ALBERTA—concluded.					
Hand miners <sup>2</sup> .....	Day	4.50	8	7.22	8	Labourers, underground.....	Day	5.58	8	6.89	8
Hoisting engineers.....	Day	4.60	8	5.05	8	Labourers, surface.....	Day	5.18	8	6.58	8
Drivers.....	Day	3.60	8	3.15	8	Machinists.....	Day	7.16	8	8.14	8
Bratticemen.....	Day	3.60	8	4.15	8	Carpenters.....	Day	7.16	8	8.14	8
Pumpmen.....	Day	4.00	8	4.30	8	Blacksmiths.....	Day	7.16	8	8.14	8
Labourers, underground.....	Day	3.35	8	4.55	8	VANCOUVER ISLAND <sup>3</sup>					
Labourers, surface.....	Day	3.25	8	3.90	8	Contract miners.....	Day	8.70 <sup>1</sup>	8	8.10	8
Machinists.....	Day	4.60	8	3.80	8	Hand miners <sup>2</sup> .....	Day	6.64	8	5.77	8
Carpenters.....	Day	4.05	8	5.15	8	Machine miners <sup>2</sup> .....	Day	6.29	8	5.42	8
Blacksmiths.....	Day	4.30	8	4.60	8	Hoisting engineers.....	Day	7.16	8	6.29	8
	Day		8	4.85	8	Drivers.....	Day	5.94	8	5.07	8
						Bratticemen.....	Day	6.29	8	5.42	8
						Pumpmen.....	Day	5.94	8	5.07	8
						Labourers, underground.....	Day	5.94	8	5.07	8
						Labourers, surface.....	Day	5.46	9	4.59	9
						Machinists.....	Day	7.53	8	6.66	8
						Carpenters.....	Day	6.81	8	5.94	8
						Blacksmiths.....	Day	7.28	8	6.41	8
ALBERTA—											
Contract miners.....	Day	10.63	8	9.57	8						
Machine miners <sup>2</sup> .....	Day	7.01	8	8.02	8						
Hand miners <sup>2</sup> .....	Day	6.35	8	7.05	8						
Hoisting engineers.....	Day	7.05	8	7.30	8						
Drivers.....	Day	5.98	8	7.21	8						
Bratticemen.....	Day	6.25	8	7.50	8						
Pumpmen.....	Day	5.58	8	6.89	8						

<sup>1</sup>Average earnings, per day worked on contract.<sup>2</sup>Minimum rate per day when not working on contract, per ton, yard, etc.<sup>3</sup>No figures for Chinese employees included.<sup>4</sup>Year 1920<sup>5</sup>Some engineers, pumpmen, firemen, etc. work seven days per week.



22—Samples of Wages and Hours of Labour for various Factory Trades in Canada, September, 1920, and September, 1921.

Industry and Occupation.	September, 1920.		Unit.	September, 1921.		Industry and Occupation.	Unit.	September, 1920.		Wages.	Hours per week.
	Wages.	Hours per week.		Wages.	Hours per week.						
TEXTILES (COTTONS).											
Carders— Sample No. 1. Sample No. 2. Sample No. 3. Sample No. 4. Sample No. 5. Sample No. 6. Sample No. 7.	Hour	\$ .32½	50	Warpers—on.	Day	\$ 3.00	55				
	Hour	.35	50	Sample No. 4.	Week	22.00	55				
	Hour	.49½	45	Sample No. 5.	Day	1.44	50				
	Hour	.29	50	Sample No. 6.							
	Hour	.28½	50								
	Hour	.29	50	SASH AND DOOR FACTORIES.							
	Hour	.46	50	Bench Hands Woodworking—							
Loom Fixers— Sample No. 1. Sample No. 2. Sample No. 3. Sample No. 4. Sample No. 5. Sample No. 6. Sample No. 7.	Hour	.56	50	Sample No. 1.	Week	30.00	50				
	Hour	.55	50	Sample No. 2.	Week	23.00	54				
	Hour	.55	45	Sample No. 3.	Hour	.60	55				
	Hour	.55	50	Sample No. 4.	Month	83.25	55				
	Hour	.55	50	Sample No. 5.	Hour	.75	44				
	Hour	.55	50	Sample No. 6.							
	Hour	.61	50	Sample No. 7.							
Ring Spinners— Sample No. 1. Sample No. 2. Sample No. 3. Sample No. 4. Sample No. 5. Sample No. 6. Sample No. 7.	Hour	.26	50	FURNITURE.							
	Hour	.30½	50	Cabinet Makers—							
	Hour	.28	50	Sample No. 1.	Day	3.00	55				
	Hour			Sample No. 2.	Day	3.53	55				
	Hour			Sample No. 3.	Day	4.00	55				
	Hour			Sample No. 4.	Day	5.50	54				
	Hour			Sample No. 5.	Hour	.53	50				
Weavers— Sample No. 1. Sample No. 2. Sample No. 3. Sample No. 4. Sample No. 5. Sample No. 6. Sample No. 7.	Hour	.43	50	Sample No. 6.	Day	4.50	55				
	Hour	.49½	50	Sample No. 7.	Hour	.47-.60	50				
	Hour	.50	45								
	Hour	.38½	50	CARRIAGES AND WAGGONS.							
	Hour	.33½	50	Woodworkers—							
	Hour	.33½	50	Sample No. 1.	Day	23.50	50				
	Hour	.32½	50	Sample No. 2.	Week	27.50-28.87	55				
Sample No. 7.	Hour	.40	50	Sample No. 3.	Hour	.25-.27	49				
				Sample No. 4.	Week	13.50	54				
TEXTILES (WOOLLENS).											
Carders— Sample No. 1. Sample No. 2. Sample No. 3. Sample No. 4. Sample No. 5. Sample No. 6. Sample No. 7.	Day	3.65-4.40	55	Boots and Shoes.							
	Day	3.90-6.50	50	Leathers—							
	Day	3.50	54	Sample No. 1.	Week	23.50	54				
	Day	5.00	55	Sample No. 2.	Week	28.50	45				
	Week	30.00	55	Sample No. 3.	Week	28.00	49				
	Day	4.05	50	Sample No. 4.	Day	4.25	50				
	Hour	.35	50	Sample No. 5.	Day	5.00	50				
Mule Spinners— Sample No. 1. Sample No. 2. Sample No. 3. Sample No. 4. Sample No. 5. Sample No. 6. Sample No. 7.	Day	4.00-6.00	55	Machine Operators—							
	Day	3.90-6.50	50	Sample No. 1.	Week	40.15	45				
	Day	2.50-2.75	54	Sample No. 2.	Week	27.00	49				
	Day	3.00	55	Sample No. 3.	Day	3.40	50				
	Week	22.00	55	Sample No. 4.	Day	5.00	50				
	Day	1.62-2.52	50								
	Day	2.85-3.10	55	HARNESSEMAKERS.							
Sample No. 1. Sample No. 2. Sample No. 3.	Day	5.10	47½	Harness Makers—							
	Day	5.10	47½	Sample No. 1.	Day	4.50	54				
	Day	5.10	47½	Sample No. 2.	Hour	.53	59				
				Sample No. 3.	Week	27.50	60				

Industry and Occupation.	Unit.	September, 1920.		September, 1921.		Industry and Occupation.	Unit.	September, 1920.		September, 1921.	
		Wages.	Hours per week.	Wages.	Hours per week.			Wages.	Hours per week.	Wages.	Hours per week.
TANNERIES.											
Fleathers—						UNSKILLED LABOUR— concluded.					
Sample No. 1.....	Day	5.00	54	3.75	50	Quebec—	Hour	.40	54	.40	40
Sample No. 2.....	Day	4.75	51	3.25	51	No. 9, Montreal.....	Hour	.48	54	.37½	49½
Washers—						No. 10, Montreal.....	Hour	.45	48	.35	48
Sample No. 1.....	Day	4.50	54	3.42	50	No. 11, Montreal.....	Hour	.43½	54	.43½	54
Sample No. 2.....	Day	4.00	51	3.00	51	No. 12, Montreal.....	Week	22.00	55	20.00	55
FLOUR MILLS.											
Millers—						No. 13, Montreal.....	Hour	.43½	48	.30	48
Sample No. 1.....	Week	20.00	60	20.00	60	No. 14, Montreal.....	Week	18.90	49½	18.00-19.00	49½
Sample No. 2.....	Week	36.00	60	33.52	60	No. 15, Montreal.....	Hour	.39	54	.30	54
Sample No. 3.....	Week	26.00-38.45	60	30.00-38.45	60	ONTARIO—					
Sample No. 4.....	Hour	.55	60	4.50	60	No. 25, Brantford.....	Hour	.45-50	48	.35	50
Sample No. 5.....	Day	4.50	60	4.50	60	No. 26, Brantford.....	Hour	.45-50	49	.44	44
Sample No. 6.....	Week	42.00	60	42.00	60	No. 27, Brantford.....	Hour	.45-50	44	.40-50	44
Sample No. 7.....	Week	25.00	66	28.80	66	No. 28, Brantford.....	Hour	.45-50	50	.40	50
Sample No. 8.....	Week	38.00	60	38.00	60	No. 29, Hamilton.....	Hour	.50-62	50	.45-57	50
Sample No. 9.....	Week	31.25-37.50	60	31.25-37.50	60	No. 30, Hamilton.....	Hour	.45	50	.34	50
MEAT PACKING.											
Slaughtering and Butchers—						No. 31, London.....	Hour	.42½-47½	50	.35	44
Sample No. 1.....	Week	36.10	47½	23.75	47½	No. 32, London.....	Hour	.42	50	.54	50
Sample No. 2.....	Week	30.00	50	30.00	50	No. 33, London.....	Hour	.35	44	.30	44
Sample No. 3.....	Hour	.65-.67	50	.60-.67	50	No. 34, London.....	Hour	.45	50	.42-48	50
Sample No. 4.....	Hour	.95	48	.75	44	No. 35, London.....	Hour	.42	48	.42-48	50
PULP AND PAPER.											
Grindermen—						No. 36, London.....	Hour	.37	44	.30	44
Sample No. 1.....	Hour	.45	48	.40	48	No. 37, London.....	Day	4.50	51	4.95	50
Sample No. 2.....	Hour	.52	48	.42	48	No. 38, London.....	Week	20.60	55	15.20	49
Sample No. 3.....	Hour	.62	48	.57	48	No. 39, London.....	Week	.35	50	.34	44
Sample No. 4.....	Hour	.58	48	.48	48	No. 40, Ottawa.....	Hour	.45-50	50	.30-40	50
Sample No. 5.....	Hour	.60	48	.54	48	No. 41, Toronto.....	Hour	.50	50	.50	-
Sample No. 6.....	Hour	.37½	72	.34	72	No. 42, Toronto.....	Hour	.40	50	.40	-
UNSKILLED LABOUR.											
NOVA SCOTIA.											
No. 1, Halifax.....	Hour	.55	50	.45	44	No. 43, Toronto.....	Hour	.44	44	.40	-
No. 2, Halifax.....	Hour	.40	50	.40	50	No. 44, Toronto.....	Week	17.00	60	17.00	48
No. 3, Halifax.....	Hour	.42½	50	.37½	48	No. 45, Brandon.....	Hour	.50-55½	50	.44½-35	50
No. 4, Sydney.....	Hour	.40-50	60	.35-45	55	No. 46, Winnipeg.....	Hour	.50	54	.40-45	50
No. 5, Sydney.....	Hour	.40-50	54	.33½	51	No. 47, Winnipeg.....	Week	25.00-31.00	50	25.00-30.00	50-54
No. 6, Sydney.....	Hour	.35	54	.35	51	No. 48, Winnipeg.....	Hour	.45	55	.35	55
NEW BRUNSWICK.											
No. 7, Moncton.....	Week	20.00	60	20.00	60	No. 49, Winnipeg.....	Hour	.60	50	.60	50
No. 8, St. John.....	Week	20.00	54	20.00	54	ALBERTA—					
						No. 50, Regina.....	Hour	.32	48	.32	48
						No. 51, Calgary.....	Week	40.00	48	24.00	48
						No. 52, Edmonton.....	Hour	.45	49½	.35	49½
						BRITISH COLUMBIA—					
						No. 53, New Westminster.....	Hour	.50	51	.35-45	54
						No. 54, New Westminster.....	Hour	.30	50	.27	50
						No. 55, Vancouver.....	Day	4.75	44	4.20	44
						No. 56, Vancouver.....	Day	4.25	44	4.00	44
						No. 57, Vancouver.....	Hour	.60½	44	.52½	44
						No. 58, Vancouver.....	Day	4.85	44	4.60	44

23.—Wages per Hour and Hours worked per Week in Leading Trades in Canadian Cities, 1921.

Trades.	Unit.	Halifax.		Quebec.		Montreal.		Ottawa.		Toronto.		Hamilton.		Winnipeg.		Calgary.		Vancouver.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
1. BUILDING TRADES—																			
Bricklayers and masons.....	1920	.75	44	.75	50	1.00	44	1.00	44	1.00	44	1.02½	44	1.25	44	1.25	44	1.12½	44
	1921	.75	44	.75	54	.90	50	.90	44	1.00	44	.90-1.00	44	1.15	44	1.15	44	1.06½	44
Carpenters.....	1920	.66	44	.50	54	.76	48	.85	44	.90	44	.85	44	1.00	44	1.00	44	.90½	44
	1921	.66	44	.52½	60	.65	44	.75	44	.90	44	.75	44	.90	44	.90	44	.81½	44
Plumbers.....	1920	.70	44	.50	54	.72	44	.80	44	.90	44	.90	44	1.00	44	1.05	44	1.00	44
	1921	.70	44	.50	54	.62½	44	.80	44	.99	44	.85	44	1.00	44	1.00	44	.90	44
Builders' Labourers.....	1920	.42½	55	.45	54	.45	50	.60	44	.55	60	.50	60	.60	50	.60	44	.60	65
	1921	.40	45	.45	54	.30	40	.50	44	.50	60	.50	50	.50	48	.40	50	.50	62½
2. METAL TRADES—																			
Blacksmiths.....	1920	.75	80	.60	70	.70	80	.52	70	.48	50	.60	80	.70	80	.85	88	.78	90
	1921	.50	70	.45	60	.50	70	.60	65	.60	70	.50	65	.65	80	.85	85	.80	90
Machinists.....	1920	.72½	75	.55	65	.70	80	.60	70	.75	85	.65	80	.65	80	.85	85	.80	90
	1921	.62½	75	.45	60	.50	70	.56	63	.60	75	.50	67	.65	72	.85	85	.67½	84
Iron Moulders.....	1920	.70	75	.60	65	.85	87½	.70	50	.80	95	.75	90	.80	50	.85	44	.75	90
	1921	.70	75	.40	55	.65	75	.45	64	.60	75	.68	72	.67½	63	.85	44	.75	44
Sheet Metal Workers.....	1920	.70	75	.50	55	.65	48	.75	44	.90	44	.85	44	.90	44	.95	44	1.00	44
	1921	.62½	70	.60	62½	.42½	48	.75	44	.90	44	.55	80	.60	44	.90	44	.87½	90
3. PRINTING TRADES—																			
Compositors.....	1920	32.00	48	25.50	48	36.00	48	38.00	48	38.00	48	34.00	48	45.00	46	45.00	45	40.50	45
	1921	35.00	48	26.00	48	36.00	48	38.00	48	38.00	48	—	—	48.00	46	45.00	45	40.50	45
Pressmen .....	1920	30.00	48	25.00	48	36.00	48	35.00	48	35.00	48	34.00	48	44.00	48	45.00	45	40.50	48
	1921	29.00	48	23.00	48	36.00	48	35.00	48	36.00	48	35.00	48	44.00	48	44.00	44	39.60	44
		32.80				40.00				45.00				46.00				43.50	48

23.—Wages per Hour and Hours worked per Week in leading Trades in Canadian Cities, 1921.—concluded.

Trades.	Unit.	Halifax.		Quebec.		Montreal.		Ottawa.		Toronto.		Hamilton.		Winnipeg.		Calgary.		Vancouver.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
3. PRINTING TRADES—concluded.																			
Bookbinders . . . . .	1920 Week	—	—	21-00	48	35-00 to 37-50	48	—	—	34-10	48	34-00	48	39-00	48	45-00	45	40-50	48
	1921 “	—	—	20-00 to 26-10	50	34-00 to 42-00	48	—	—	32-64 to 36-00	48	35-00 to 36-00	48	39-00	48	44-00	44	39-60 to 40-50	44-48
Bindery (Girls) . . . . .	1920 Week	—	—	9-00 to 12-00	50	15-00	48	—	—	16-50	48	—	—	18-00	48	20-00 to 21-00	45	20-25	48
	1921 “	—	—	9-00	50	14-40 to 15-00	48	—	—	14-40 to 18-55	48	12-00 to 15-00	48	12-00 to 16-00	44-48	19-55	44	14-00 to 20-25	44-48
4. CIVIC EMPLOYEES—																			
Firemen . . . . .	1920 Year	1,220-00	—	1,118-00	—	1,464-00	—	1,500-00	—	1,812-00	—	1,617-00	—	1,740-00	—	1,680-00	—	1,800-00	—
	1921 “	1,220-00	—	1,157-00	—	1,703-00	—	1,500-00	—	1,812-00	—	1,617-00	—	—	—	1,630-00	—	1,512-00	—
5. ELECTRIC RAILWAYS, LIGHT AND POWER—																			
Conductors and Motormen . . . . .	1920 Hour	.50 to .46	53-59	.45	60	.55	60	.55	54	.60	48	.52	57	.60	48	.67 1/2 to .72 1/2	48	.60	48
	1921 “	.46	53-59	.45	60	.48	60	.55	54	.60	48	.52	56	.60	48	.67 1/2 to .72 1/2	48	.65	48
Shedmen . . . . .	1920 Hour	.35	60	.30	65	—	—	.54	54	.55-.56	51	.47	54	—	—	.72 1/2	48	.58	44
	1921 “	.38-.40	60	.30	65	—	—	.54	54	.55-.56	51	.47	54	—	—	.72 1/2	48	.58	44
6. MISCELLANEOUS LOCAL TRANSPORTATION—																			
Auto Mechanics . . . . .	1920 Hour	.65-.75	54	60-.75	57-60	60-.70	48-54	1	1	.55-.75	44-54	55-.75	48-54	61 1/2-.75	50-54	75-.85	54	65-.85	44
	1921 “	.60	48	45-.50	60	50-.65	48-60	2	2	60-.70	44-50	50-.70	48-60	70-.79 1/2	44-50	60-.80	49	65-.85	44

1—1920, \$25.00—\$27.00 per week of 54 hours.

2—1921, \$24.00—\$32.00 per week of 45-54 hours.



**Wages in Canadian Manufacturing Industries in 1915 and 1919.**—At the census of manufactures taken for 1915, an attempt was made for the first time to secure detailed statistics of the wages paid in manufacturing establishments throughout Canada. Statistics of wages were actually obtained from 14,887 manufacturing concerns, having 394,597 wage-earners out of a total enumerated in the census of 462,200. In 1919, statistics of wages were obtained on a somewhat similar schedule for 525,505 wage-earners out of an ascertained total of 594,118 wage-earners employed in Canadian manufacturing industries. The statistics for these two years are given for comparative purposes in Table 24

The increase in wages during the four year period between 1915 and 1919 may best be measured by taking the median wage, that is, the wage of the individual in each group who, as nearly as can be ascertained, has just as many persons receiving more than him as receive less than him. On the assumption that the earnings of the members of the wage-group containing these individuals were evenly distributed between the upper and lower limits, the median wages in 1919 were as follows, the 1915 median wages being given for comparative purposes in parentheses: males over 16, \$22.78 (\$12.64); females over 16, \$11.59 (\$6.87); males under 16, \$8.37, females under 16, \$7.71, all wage-earners under 16, \$8.06 (\$4.48). For males over 16 the median wage, therefore, increased by 80.2 p.c., for females over 16 by 68.7 p.c., for wage-earners under 16 by 79.9 p.c. in the four year period. Table 28, compiled by the Department of Labour, shows an increase in the cost of living from 104 p.c. of the 1913 cost in December 1915 to 175 p.c. in December 1919, or an advance of 68.2 p.c. on the 1915 prices.

24.—Weekly Wages in Canadian Manufacturing Industries, 1915 and 1919.

(Weekly pay for week ended Dec. 15 in each year).

1915.

Weekly Wage Groups.	Under 16 years of age.	Wage-earners over 16 years of age.		Total.	
		Male.	Female.		
		No.	No.		No.
Under \$4.....		3,154	3,192	5,310	11,656
\$4 but under \$5.....		2,179	4,504	7,144	13,827
\$5 " " \$6.....		1,608	5,656	10,927	18,191
\$6 " " \$7.....		756	8,713	12,060	21,529
\$7 " " \$8.....		307	11,031	9,766	21,104
\$8 " " \$9.....		97	16,813	7,913	24,823
\$9 " " \$10.....		91	34,135	5,318	39,544
\$10 " " \$12.....		104	59,672	5,250	65,026
\$12 " " \$15.....		67	72,828	2,855	75,750
\$15 " " \$20.....		38	62,003	963	63,004
\$20 " " \$25.....		10	24,839	162	25,011
\$25 and over.....		..	15,015	117	15,132
<b>Totals.....</b>		<b>8,411</b>	<b>318,401</b>	<b>67,785</b>	<b>394,597</b>
<b>Summary.</b>					
Under \$10 per week.....		8,192	84,044	58,438	150,674
Over \$10 per week.....		219	234,357	9,347	243,923
Per cent under \$10 per week.....		97.4	26.4	86.21	38.18
Per cent over \$10 per week.....		2.6	73.6	13.79	61.82

## 24.—Weekly Wages in Canadian Manufacturing Industries, 1915 and 1919—concluded.

(Weekly pay for week ending Dec. 15 in each year.)

1919.

Weekly Wage Groups.	Wage-earners under 16 years of age.		Wage-earners over 16 years of age.		Total.
	Males.	Females.	Males.	Females.	
	No.	No.	No.	No.	No.
Under \$5.....	1,194	776	2,711	3,296	7,977
\$5 but under \$ 6.....	613	940	1,946	2,966	6,465
\$6 " " \$ 7.....	906	1,009	2,680	4,961	9,556
\$7 " " \$ 8.....	1,067	964	2,792	6,465	11,288
\$8 " " \$ 9.....	1,039	922	3,644	8,794	14,399
\$9 " " \$10.....	954	865	5,010	10,516	17,345
\$10 " " \$11.....	739	514	6,325	11,913	19,491
\$11 " " \$12.....	447	274	5,705	9,650	16,076
\$12 " " \$13.....	446	163	9,027	10,792	20,428
\$13 " " \$14.....	239	113	7,974	7,572	15,898
\$14 " " \$15.....	168	63	10,277	6,895	17,403
\$15 " " \$16.....	146	99	14,671	6,982	21,898
\$16 " " \$18.....	104	65	26,626	6,614	33,409
\$18 " " \$20.....	58	21	40,835	4,320	45,234
\$20 " " \$22.....	57	15	44,224	2,974	47,270
\$22 " " \$24.....	60	6	41,287	1,573	42,926
\$24 " " \$26.....	30	4	39,216	1,365	40,615
\$26 " " \$28.....	23	12	25,552	539	26,126
\$28 " " \$30.....	5	—	22,578	343	22,926
\$30 and over.....	33	2	88,104	636	88,775
<b>Total.....</b>	<b>8,328</b>	<b>6,827</b>	<b>401,184</b>	<b>109,166</b>	<b>525,505</b>
<b>Summary.</b>					
Under \$10 per week.....	5,773	5,476	18,783	36,998	67,030
Per cent.....	69.32	80.21	4.68	33.89	12.76
Over \$10 per week.....	2,555	1,351	382,401	72,168	458,475
Per cent.....	30.68	19.79	95.32	66.11	87.24

## 25.—Wage Earners classified by Groups of Industries and of Wages, 1919.

(Week ended December 15, 1919).

Group of Industries.	Under \$5 per Week.	\$5 to \$10 per Week.	\$10 to \$15 per Week.	\$15 to \$20 per Week.	\$20 to \$24 per Week.	\$24 to over per Week.	Total wage earners.
	No.	No.	No.	No.	No.	No.	No.
Food products.....	977	7,839	10,184	9,679	10,186	15,405	54,170
Textiles.....	1,937	18,852	27,204	17,433	8,253	15,143	87,832
Iron and steel products.....	508	2,619	5,454	11,317	11,424	26,706	58,028
Timber and lumber and their re-manufactures.....	404	3,268	5,468	10,439	7,681	8,863	36,123
Leather and its finished products.....	244	3,532	5,639	5,246	3,585	5,458	23,704
Paper and printing.....	1,227	5,647	6,952	7,891	7,333	16,548	45,598
Liquors and beverages.....	57	279	496	1,406	954	953	4,145
Chemicals and allied products.....	40	920	1,202	1,901	2,905	6,309	13,277
Clay, glass and stone products.....	57	313	891	2,413	2,721	5,329	11,724
Metals and metal products other than iron and steel.....	243	2,482	3,423	4,498	4,189	12,814	27,649
Tobacco and its manufactures.....	392	2,606	2,565	2,006	1,082	915	9,566
Vehicles for land transportation.....	130	365	2,472	6,934	10,676	29,955	50,532
Vessels for water transportation.....	231	424	1,008	1,838	5,166	9,100	17,817
Miscellaneous industries.....	1,402	7,337	11,386	13,870	11,690	21,191	66,876
Hand trades.....	228	2,570	4,952	3,620	2,351	4,743	18,464
<b>Total.....</b>	<b>7,977</b>	<b>59,053</b>	<b>89,296</b>	<b>100,541</b>	<b>90,196</b>	<b>178,442</b>	<b>525,505</b>

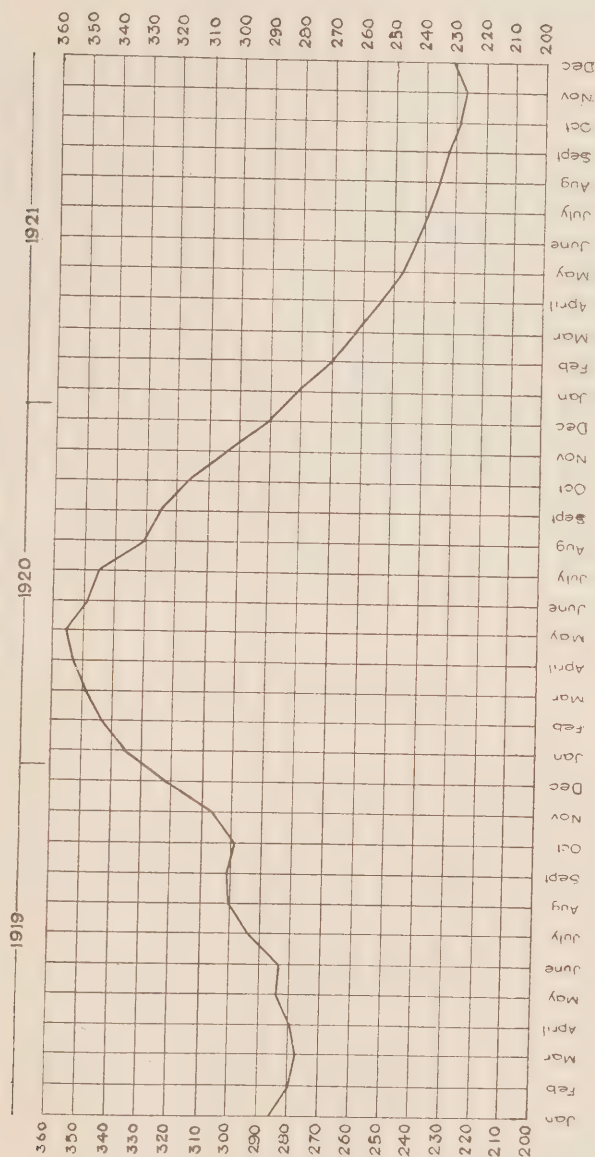
**PRICES AND THE COST OF LIVING.**

**Wholesale Prices.**—Statistics as to wholesale prices in Canada have been published by the Department of Labour since 1910, an index number being calculated to show the movement from month to month and from year to year. A special report, issued in 1910, contained records of prices of 230 commodities from 1890-1909, and afforded the basis for the index number, the statistics being brought down to date each year in annual reports for calendar years. Since 1917 annual reports have not been issued, but the index figures have appeared monthly in the *Labour Gazette*.

The index number has been calculated from the prices each month of 271 commodities since 1915, 272 commodities from 1910 to 1914, and 230 commodities from 1890 to 1909. The index figure shows the price level each month or year as a percentage of prices during the period adopted as a base, which was the decade 1890 to 1899. Each month or year the current price of each article is divided by the average price of the same article for the decade 1890-1899 and multiplied by 100, thus obtaining its current relative price, or its percentage of the price for the base period. These relative prices or percentages are averaged to ascertain the general index number for all commodities included and also by groups to determine the group averages, and sub-group averages. The index number is not weighted, otherwise than by the selection of large numbers of items from important commodity groups, that is, no allowance is made for the relative importance of the various articles included, the simple arithmetic average being taken in each case.

The accompanying tables and diagrams show the steep decline in prices during 1921, continuing the downward movement which began in May 1920, and was experienced not only in Canada but throughout the world, except where the excessive issue of paper currency tended to raise prices still more. The table of group averages by months shows that prices of farm products and raw materials declined most until the end of 1920, and that prices of semi-manufactured goods declined generally after the downward movement in raw materials had in a general way ceased about the end of 1920. At the end of 1921 prices were approximately 70 per cent above 1913 levels, whereas at the beginning of the year, the general level was 108 per cent higher, and in May 1920 as much as 165 per cent above 1913 levels.

COURSE OF WHOLESALE PRICES IN CANADA, BY MONTHS, 1919-1921.  
(Average Prices 1890-1899=100.)





## 26.—Index Numbers of Wholesale Prices in Canada by Months and Groups of Commodities, 1921.

Average Prices 1890-1899=100.

Commodity Groups.	1921. <sup>1</sup>											
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1. Grains and fodder...	255.0	234.1	229.9	211.6	205.6	200.0	200.5	208.4	197.9	174.3	171.6	179.4
2. Animals and meats...	313.7	306.6	308.1	303.2	284.2	261.8	256.9	256.8	238.7	211.8	202.8	219.6
3. Dairy produce...	333.3	284.8	268.8	248.5	193.9	191.2	204.9	219.0	216.8	229.0	243.0	261.9
4. Fish...	237.7	218.6	218.6	225.5	217.2	198.6	182.0	191.4	192.6	189.4	191.4	191.4
5. (a) Fruits and vegetables...	219.5	194.4	209.6	193.9	193.5	202.3	188.2	217.7	202.8	204.8	210.0	224.6
(b) Miscellaneous foods...	244.3	236.2	234.1	217.8	218.0	210.3	200.7	199.3	196.2	186.9	181.7	183.2
6. Textiles...	298.3	266.8	258.9	250.3	244.6	235.1	234.2	236.2	239.0	241.6	234.1	230.4
7. Hides, leather and boots...	215.3	206.4	194.2	188.0	186.5	174.3	173.1	166.1	164.5	163.6	163.6	163.6
8. (a) Metals...	206.8	199.1	188.2	173.1	174.7	183.1	175.1	173.2	170.4	170.4	167.3	168.5
(b) Implements...	271.7	271.0	256.1	254.4	249.6	249.3	250.5	248.1	246.6	245.0	245.0	245.0
9. Fuel and lighting...	291.9	276.8	275.6	267.6	255.8	251.0	244.8	242.9	243.1	248.8	249.3	249.3
10. Building materials—												
(a) Lumber...	450.3	432.6	418.3	414.7	406.8	395.8	393.6	348.5	342.2	344.3	326.9	326.9
(b) Miscellaneous...	258.8	255.1	254.2	250.0	245.3	242.4	236.5	231.0	230.2	227.0	225.4	225.4
(c) Paints, oils, etc.	370.1	356.4	318.2	302.6	302.1	304.8	302.8	301.0	291.1	291.1	291.3	290.1
11. House furnishings...	384.5	384.5	384.5	352.7	352.7	352.7	352.7	322.3	321.8	314.0	307.0	307.0
12. Drugs and chemicals...	222.1	213.4	205.2	203.6	201.5	198.1	198.4	199.6	194.3	191.5	187.5	186.5
13. Miscellaneous—												
(a) Raw furs...	397.6	492.1	498.0	498.0	450.2	465.4	493.9	510.5	557.0	590.4	635.6	664.0
(b) Liquors and tobacco...	299.1	296.8	298.0	270.1	270.1	269.0	269.0	269.0	269.0	267.4	267.4	265.6
(c) Sundries...	197.9	194.3	187.7	187.3	188.7	188.7	185.2	185.3	175.2	172.5	172.6	172.4
<b>All commodities...</b>	<b>281.3</b>	<b>270.1</b>	<b>263.1</b>	<b>253.7</b>	<b>247.3</b>	<b>242.6</b>	<b>238.6</b>	<b>236.4</b>	<b>232.7</b>	<b>229.2</b>	<b>227.3</b>	<b>230.7</b>

<sup>1</sup>Preliminary figures.

## 27.—Index Numbers of all Commodities by Groups, 1894-1921.

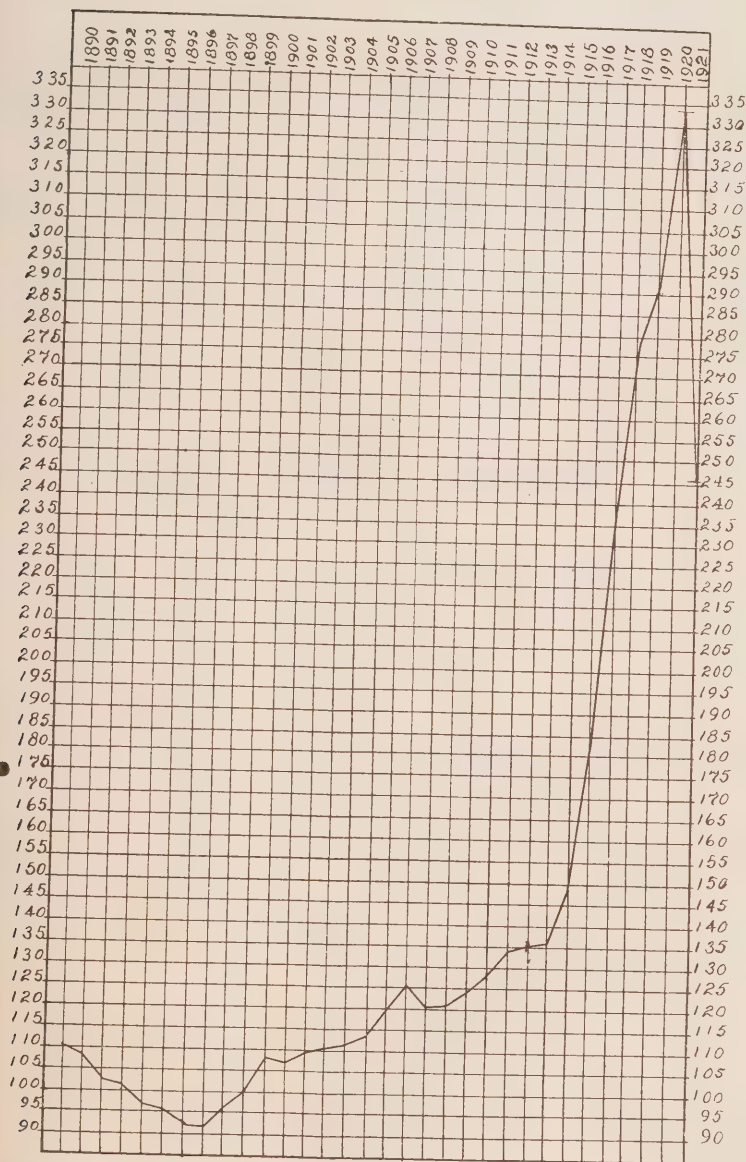
Average Prices 1890-1899=100.

Commodity Groups.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
1. Grains and fodder...	94.3	98.8	85.2	80.6	98.8	96.7	99.9	107.3	116.1	106.5	115.5	116.4	118.5	140.2
2. Animals and meats...	98.7	92.2	82.4	90.4	97.9	95.1	103.4	111.3	122.2	117.9	111.3	120.7	130.1	133.8
3. Dairy produce...	104.6	94.8	90.1	90.1	92.9	101.4	109.0	120.5	106.9	108.9	107.2	115.1	120.2	131.5
4. Fish...	96.4	101.4	102.6	98.6	99.6	110.0	106.4	113.2	110.2	116.2	119.5	115.7	121.8	129.5
5. Other foods...	95.0	95.2	87.1	86.0	94.3	93.6	96.4	98.6	98.4	98.1	101.8	100.7	103.1	112.5
6. Textiles...	97.3	93.6	96.9	98.0	95.2	99.8	100.0	103.6	101.0	105.9	110.4	114.6	123.4	126.1
7. Hides, leather, boots...	89.9	98.6	92.9	100.1	105.0	109.4	113.8	112.8	118.2	115.7	113.6	119.6	128.1	125.5
8. Metals and implements—														
(a) Metals...	91.1	87.0	87.5	85.7	87.6	111.9	121.2	110.4	102.8	105.5	99.7	108.4	128.6	134.8
(b) Implements...	102.2	101.0	98.5	93.1	94.3	98.0	100.1	102.2	104.7	105.7	106.2	106.1	106.0	107.4
9. Fuel and lighting...	97.5	97.0	98.9	96.4	93.5	96.9	100.8	98.1	104.9	111.0	103.0	104.1	106.4	108.8
10. Building materials—														
(a) Lumber...	104.6	102.8	97.1	93.9	90.8	95.8	114.0	114.6	122.0	128.8	131.3	134.1	152.7	165.2
(b) Miscellaneous...	98.7	95.2	93.9	87.7	87.4	97.2	111.8	106.0	104.6	107.7	107.2	106.8	104.7	108.7
(c) Paints, oils, glass...	95.5	96.1	96.2	95.5	100.0	107.6	125.9	121.9	128.1	126.3	122.4	125.3	135.3	141.2
11. House furnishings...	101.3	97.9	97.5	99.8	99.6	100.2	110.2	107.9	109.2	109.6	112.7	107.3	113.0	112.7
12. Drugs and chemicals...	103.1	100.3	99.8	96.5	96.8	93.3	101.5	99.8	102.2	105.5	109.0	106.4	106.3	108.5
13. Miscellaneous—														
(a) Furs, raw...	113.5	80.5	80.7	88.0	111.1	111.8	147.3	140.9	145.2	168.1	171.3	217.4	229.2	239.4
(b) Liquors, tobaccos...	98.7	99.4	98.0	103.9	103.9	102.3	103.3	103.3	103.7	107.8	108.1	108.1	125.5	
(c) Sundries...	93.7	91.3	92.6	91.2	103.3	109.5	113.0	110.9	116.8	115.9	119.1	121.1	120.9	123.0
<b>All commodities...</b>	<b>97.2</b>	<b>95.6</b>	<b>92.5</b>	<b>92.2</b>	<b>96.1</b>	<b>100.1</b>	<b>108.2</b>	<b>107.0</b>	<b>109.0</b>	<b>110.5</b>	<b>111.4</b>	<b>113.8</b>	<b>120.0</b>	<b>126.2</b>

NOTE.—See page 646 for conclusion of Table 27.

COURSE OF WHOLESALE PRICES IN CANADA, 1890-1921.

(Average prices 1890-1899=100.)



## 27.—Index Numbers of all Commodities by Groups, 1894-1921—concluded.

Average Prices 1890-1899=100.

Commodity Groups.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
1. Grains and fodder..	148.3	149.9	140.7	148.4	167.3	136.8	156.5	186.9	195.2	281.5	316.2	310.2	360.6	205.7
2. Animals and meats..	129.6	148.6	163.6	146.6	160.8	180.8	192.3	187.2	217.7	288.1	354.5	357.8	356.4	263.7
3. Dairy produce.....	136.3	133.6	135.7	136.2	159.0	154.7	154.4	161.4	183.5	230.5	259.4	296.5	314.7	241.3
4. Fish.....	120.5	134.0	145.1	143.6	155.7	158.0	156.0	149.7	184.8	205.8	247.0	236.6	247.4	204.5
5. Other foods.....	110.3	107.6	111.3	118.7	126.0	117.4	118.8	125.5	156.2	220.6	250.5	251.1	304.2	207.2
6. Textiles.....	111.0	108.3	114.6	119.2	120.7	130.8	133.5	149.2	193.4	263.4	356.9	373.1	401.0	247.5
7. Hides, leather and boots.....	120.0	135.4	135.4	139.6	152.4	163.9	171.8	180.5	233.4	275.1	279.7	349.5	314.9	179.9
8. Metals and imple- ments:—														
(a) Metals.....	106.3	101.9	97.6	108.3	117.4	119.1	113.9	152.4	198.9	259.1	273.1	206.1	240.7	179.1
(b) Implements....	104.2	102.4	104.5	104.5	104.7	105.6	106.8	112.1	135.2	181.6	225.0	240.4	258.3	253.1
9. Fuel and lighting..	102.2	103.8	103.0	100.5	113.3	118.2	110.9	108.8	132.6	193.0	221.8	237.1	310.0	258.1
10. Building materi- als:—														
(a) Lumber.....	162.6	154.6	158.5	165.4	166.5	181.3	182.1	175.7	182.1	214.5	267.1	310.8	486.5	383.4
(b) Miscellaneous..	107.5	105.7	109.2	102.6	105.4	112.7	111.4	115.9	154.9	203.5	225.4	224.5	258.7	240.1
(c) Paints, oils and glass.....	136.8	135.2	145.5	154.5	148.6	144.8	140.7	157.1	200.5	257.9	310.8	379.0	444.2	310.1
11. House furnishings..	112.8	110.4	110.6	110.4	114.5	126.2	129.5	136.5	167.1	203.7	256.9	321.2	381.0	344.7
12. Drugs and chemi- cals.....	107.1	103.9	109.5	112.1	115.5	113.3	121.6	181.3	252.2	267.9	283.5	232.0	231.5	200.3
13. Miscellaneous:—														
(a) Furs, raw.....	231.8	227.2	234.5	252.9	297.3	307.9	205.4	161.9	299.8	411.6	602.2	1009.2	1132.1	521.1
(b) Liquors and tobacco.....	118.0	117.5	132.9	151.2	155.2	134.7	136.9	135.6	142.4	167.8	259.9	275.8	312.1	275.9
(c) Sundries.....	117.6	121.6	118.0	110.3	104.3	113.1	103.5	116.6	143.0	186.8	219.5	211.6	215.2	184.0
<b>All commodities.</b>	<b>120.8</b>	<b>121.2</b>	<b>124.2</b>	<b>127.4</b>	<b>134.4</b>	<b>135.5</b>	<b>136.1</b>	<b>148.0</b>	<b>182.0</b>	<b>237.0</b>	<b>278.3</b>	<b>293.2</b>	<b>333.6</b>	<b>246.1</b>

**Retail Prices.**—Statistics as to retail prices in Canada have been published by the Department since 1910, the retail prices of the principal staple foods, of coal, wood and coal oil and also the prevailing rates for the rent of six-roomed houses being published in the *Labour Gazette* each month for the cities having a population of 10,000 or more, some sixty in number. Figures for December, 1900, and December, 1905, were also secured in a special investigation in 1914. From the averages of these figures for the Dominion and for each province a calculation of a theoretical weekly family budget of expenditure on food, fuel and light and rentals has been made for each year since 1910 and for each month since January 1914, in order to show the general movement in retail prices as the movement in wholesale prices is shown by the index number. Tables 29 and 30 show the details of the changes in the average prices of each article included in food, and fuel for the Dominion and in the cost of the three items, food, fuel and rent in each province for each month of 1921 and for earlier dates.

In addition to the statistics as to retail prices of food and fuel, and as to rates for rent, the Department during 1920 and 1921 secured figures as to retail prices of staple lines of clothing, including foot-wear, from retail dealers throughout Canada, for each year back to 1913. The figures relate to prices prevailing at the end of the year in each case, but since 1919 prices have been secured more frequently. From these quotations the percentages of changes in the cost of clothing have been calculated. Information was also secured as to the prices of household supplies, furniture, furnishings, etc., and an estimate

has been made as to the percentage changes in the cost of miscellaneous items, the effect of the information gathered showing that such changes are approximately equal to the average changes in other items. The percentage changes in food, fuel and rent have been calculated from the weekly budgets published in the Labour Gazette from month to month, and Table 28 summarizes the yearly and quarterly changes by groups, the figures for each group and for all items being weighted according to the family budget method. From July, 1920, to June, 1921, food and clothing prices fell steeply, and fuel slightly, while rent advanced. Food recovered in August and September, 1921, but by December was back to June levels. Clothing changed little on the average after June.

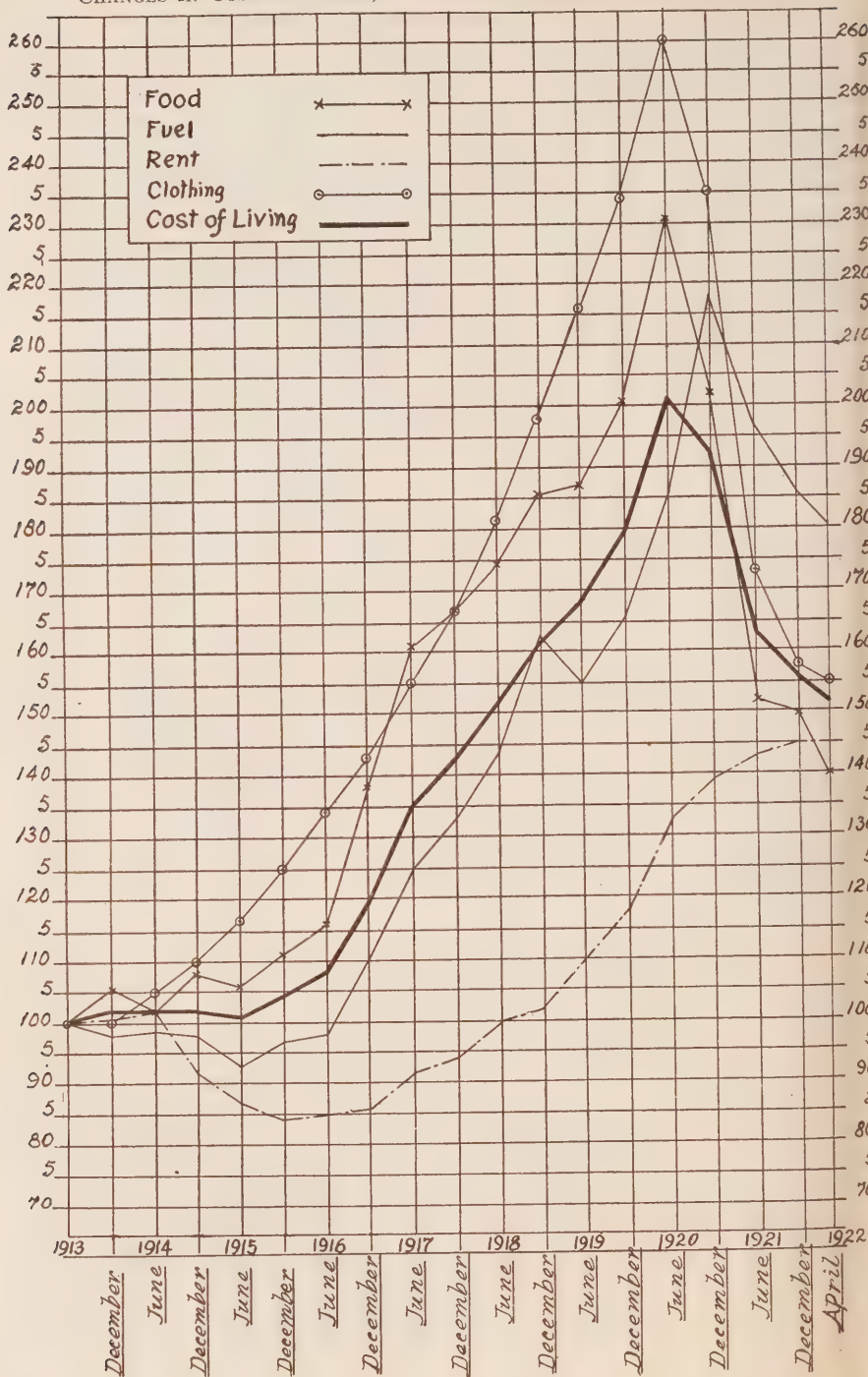
28.—Index Numbers of Changes in the Cost of Living in Canada, based upon weighted Retail Prices, 1910-1922.

Average Prices, 1913 = 100.

Date.	Food.	Fuel.	Rent.	Clothing.	Sundries.	Totals.
December, 1910.....	96	96	72	92	94	90
December, 1911.....	101	92	70	93	95	91
December, 1912.....	105	102	82	97	97	97
December, 1913.....	106	98	101	100	100	102
March, 1914.....	105	100	100	105	100	102
June, 1914.....	102	99	102	105	100	102
September, 1914.....	107	99	97	110	100	103
December, 1914.....	108	98	92	110	100	102
March, 1915.....	107	98	89	117	103	103
June, 1915.....	106	93	87	117	103	101
September, 1915.....	105	97	85	125	105	103
December, 1915.....	111	97	84	125	105	104
March, 1916.....	114	97	83	134	108	107
June, 1916.....	116	98	85	134	108	108
September, 1916.....	122	101	86	143	110	113
December, 1916.....	138	110	86	143	110	119
March, 1917.....	146	119	88	155	128	128
June, 1917.....	162	125	92	155	128	135
September, 1917.....	159	128	93	167	145	140
December, 1917.....	167	133	94	167	145	143
March, 1918.....	172	143	96	182	153	150
June, 1918.....	174	144	100	182	153	152
September, 1918.....	181	153	101	198	160	159
December, 1918.....	186	163	102	198	160	162
March, 1919.....	178	159	103	216	170	163
June, 1919.....	187	155	110	216	170	168
September, 1919.....	195	162	114	234	180	176
December, 1919.....	201	166	117	234	180	179
March, 1920.....	218	173	120	260	185	191
June, 1920.....	231	186	133	260	190	201
September, 1920.....	217	2 5	136	260	190	199
December, 1920.....	202	218	139	235	190	192
March, 1921.....	180	208	139	195	188	177
June, 1921.....	152	197	143	173	181	163
September, 1921.....	161	189	145	167	170	162
December, 1921.....	150	186	145	158	166	156
March, 1922.....	144	181	145	155	164	153
April, 1922.....	140	181	145	155	164	152



CHANGES IN COST OF LIVING, 1913-1922. (Average Prices, 1913=100)



# PRICES AND THE COST OF LIVING

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Commodity.	Quantity.	1920.												1921.											
		Dec. 1900.	Dec. 1905.	Dec. 1910.	Dec. 1913.	Dec. 1916.	Dec. 1918.	Dec. 1919.	June.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
Beef, sirloin steak...	2 lbs.	27-2	30-4	36-4	46-6	51-6	73-4	69-4	C	71-2	71-0	71-4	69-2	70-4	71-2	70-2	70-2	67-4	64-2	60-8	C	C			
Beef, shoulder roast...	2 "	19-6	24-6	26-6	31-6	33-8	50-8	45-6	54-2	46-0	44-0	45-6	44-4	44-4	43-6	42-6	40-6	37-8	35-4	33-4	C	C			
Veal, shoulder roast...	1 "	10-0	11-2	12-7	16-7	19-3	27-5	25-7	27-7	28-0	26-9	26-4	26-1	25-2	23-0	22-5	22-0	21-0	20-2	19-7	18-9	19-0			
Mutton, leg roast...	1 "	11-8	12-2	16-8	19-4	24-2	34-2	32-3	38-4	33-4	30-8	32-2	31-9	32-0	31-8	30-7	30-3	28-9	27-1	26-3	24-6	24-6			
Pork, fresh roast ham...	1 "	12-3	13-1	17-2	20-5	23-7	36-7	35-7	40-4	38-8	36-0	36-1	34-9	34-8	33-6	32-7	32-9	33-2	33-3	31-5	28-1	26-5			
Pork salt, mess...	2 "	21-8	25-0	32-6	36-6	41-2	69-6	70-6	72-2	70-6	71-4	70-4	68-2	66-8	65-0	58-8	57-8	56-8	55-8	54-8	53-2	51-8			
Bacon, breakfast...	2 "	15-4	17-8	24-3	26-0	30-9	51-3	51-8	55-8	57-0	58-4	56-1	54-5	53-0	51-4	48-2	48-0	48-3	48-7	46-1	43-4	40-8			
Lard, pure, leaf...	2 "	26-2	28-2	39-0	36-8	47-6	77-8	77-8	76-4	70-4	67-8	63-8	59-4	56-0	50-6	45-6	43-2	43-2	43-2	46-0	43-8	40-8			
Eggs, fresh...	1 doz...	25-7	30-0	44-7	49-4	56-7	71-3	82-4	56-0	60-8	75-7	72-6	55-0	40-3	36-5	33-5	38-2	42-4	46-3	50-7	59-4	67-2			
Eggs, storage...	1 "	20-2	23-4	32-0	37-4	44-9	59-7	68-5	50-1	73-9	75-7	72-6	50-6	38-3	36-5	30-8	35-1	39-7	44-3	46-6	52-0	56-7			
Milk...	6 qts...	36-6	39-6	48-6	54-6	59-4	82-2	88-8	88-8	88-8	93-6	92-4	90-6	89-4	86-4	81-0	78-6	79-2	79-2	80-4	80-4	84-8			
Butter, dairy, solid...	2 lbs.	44-2	49-4	54-0	60-0	64-2	104-4	132-4	119-4	118-6	113-4	108-8	106-2	109-4	102-8	65-0	63-0	74-8	79-6	81-2	82-0	84-8			
Butter, cream y, print...	1 "	25-5	27-7	32-0	35-4	49-0	58-1	72-6	66-8	65-3	63-6	63-5	63-0	63-9	59-2	38-0	37-2	45-3	47-3	46-8	46-8	48-0			
Cheese, old...	1 "	16-1	17-6	18-2	20-1	28-9	34-8	40-9	40-4	40-0	38-9	38-9	39-0	39-8	39-6	36-8	34-8	35-9	36-4	35-4	34-2	32-7			
Cheese, new...	1 "	14-6	15-7	17-1	19-4	28-2	32-8	37-6	38-2	37-9	37-5	36-9	37-7	38-4	37-9	36-6	34-8	35-9	37-4	38-4	39-2	39-1			
Bread, plain, white...	15 "	55-5	58-5	64-5	64-5	91-5	118-5	118-5	144-5	133-0	132-0	127-5	127-5	127-5	124-5	123-0	121-5	121-5	118-5	109-5	106-5	106-5			
Flour, family...	10 "	28-0	33-0	33-0	33-0	54-0	69-0	67-0	84-0	70-0	68-0	67-0	66-0	66-0	64-0	64-0	63-0	64-0	64-0	58-0	51-0	49-0			
Rolled oats...	5 "	18-0	19-5	20-5	21-5	27-0	40-5	39-5	42-5	38-5	38-5	35-5	34-0	32-0	31-0	30-0	30-0	30-5	30-5	29-0	28-0	26-5			
Rice, good, medium...	2 "	10-4	10-6	10-6	12-0	13-0	25-2	29-0	33-6	30-8	28-2	25-4	24-0	22-4	21-6	21-0	19-8	19-2	19-0	18-6	19-6	19-5			
Beans, handpicked...	2 "	8-6	9-4	11-0	11-6	23-8	32-0	23-0	24-0	21-8	21-6	20-2	19-8	18-0	18-0	17-4	17-0	17-0	17-4	17-6	17-2	17-2			
Apples, evaporated...	2 "	8-6	9-4	11-0	11-6	23-8	32-0	23-0	24-0	21-8	21-6	20-2	19-8	18-0	18-0	17-4	17-0	17-0	17-4	17-6	17-2	17-2			
Prunes, medium size...	1 "	9-9	7-7	12-1	12-4	13-8	22-8	26-6	29-2	28-2	24-9	24-0	22-9	22-4	21-4	21-1	21-3	20-7	20-7	21-6	21-3	22-3			
Sugar, granulated...	4 "	11-5	9-6	10-9	12-2	13-3	19-4	25-2	27-5	26-1	25-3	23-5	21-4	20-4	19-2	18-3	18-4	17-9	18-0	18-2	18-2	18-2			
Sugar, yellow...	4 "	21-6	22-0	24-4	22-0	37-2	49-6	53-2	90-4	53-6	51-2	50-4	50-4	51-2	50-8	50-0	44-4	40-4	41-6	39-2	38-0	38-0			
Tea, black, medium...	2 "	10-0	9-8	10-6	10-8	17-6	22-6	25-2	42-0	25-2	24-6	24-0	24-0	24-2	24-0	24-0	21-0	19-0	19-8	18-6	18-0	18-0			
Tea, green, medium...	1 "	8-2	8-3	8-7	8-9	9-9	15-6	15-9	16-5	15-1	14-5	14-5	14-3	14-1	14-0	13-8	13-7	13-7	13-6	13-6	13-6	13-6			
Coffee, medium...	1 "	8-7	9-2	9-3	9-7	15-1	16-5	16-9	16-1	15-7	15-8	15-8	15-7	15-4	14-7	14-9	14-9	15-4	15-1	15-0	15-0	15-0			
Potatoes...	1 bag...	24-1	28-0	29-5	36-9	64-0	86-7	75-5	216-9	75-5	75-5	69-5	57-4	48-5	41-1	38-6	35-9	59-3	83-4	64-4	55-1	52-8			
Vinegar, spirit...	1/8 qt.	.7	.7	.7	.7	.8	.9	.9	1-0	1-0	.9	1-0	1-0	.9	.9	.9	1-0	1-0	1-0	1-0	.9	1-0			
All Foods...	5-480	5-956	7-061	7-757	10-107	13-654	14-734	16-915	14-839	14-477	14-075	13-227	12-677	12-533	11-159	10-957	11-441	11-817	11-475	11-032	11-000	11-000			
Starch, laundry...	1/2 lb.	C	2-9	C	3-0	3-1	C	3-4	C	4-8	C	4-9	C	4-7	C	4-6	C	4-4	C	4-4	C	4-3			
Coal, anthracite...	1 ton	39-5	45-2	47-0	53-2	63-1	81-8	83-1	101-6	125-9	123-2	118-4	115-4	112-3	109-9	110-9	109-1	109-3	110-1	109-7	110-1	110-1			
Coal, bituminous...	1 "	31-1	32-3	38-2	47-3	63-6	64-0	72-6	92-3	92-1	91-4	86-4	83-4	88-0	88-0	87-9	77-6	75-3	74-9	73-5	72-6	72-6			
Wood, hard...	1 cord	32-5	35-3	43-8	41-1	44-5	79-8	80-0	81-7	87-8	90-5	89-4	88-3	88-0	88-0	87-9	87-4	85-0	83-2	83-6	81-1	81-1			
Wood, soft...	1 "	22-6	25-5	29-8	31-7	32-2	57-7	60-0	62-1	69-1	68-3	65-0	68-8	65-3	65-3	64-6	62-5	61-4	61-1	61-1	61-1	60-0			
Coal oil...	1 gal.	24-0	24-5	23-8	23-8	23-1	27-8	29-6	36-6	40-5	40-3	39-7	38-8	38-6	37-9	36-3	33-7	32-7	32-2	31-9	31-6	31-6			
Fuel and lighting...		\$1-497	\$1-628	\$1-826	\$1-878	\$2-10-2	\$3-107	\$3-167	\$3-546	\$4-156	\$4-169	\$4-120	\$3-978	\$3-948	\$3-814	\$3-763	\$3-701	\$3-635	\$3-610	\$3-602	\$3-567	\$3-554			
Rent...	1 month	\$2-367	\$2-885	\$3-397	\$4-780	\$4-085	\$4-830	\$5-540	\$6-303	\$6-623	\$6-601	\$6-607	\$6-621	\$6-631	\$6-770	\$6-831	\$6-861	\$6-885	\$6-885	\$6-885	\$6-909	\$6-895			
Grand total		9-373	10-499	12-315	14-445	16-328	21-639	23-459	26-813	25-666	25-296	24-850	23-873	23-308	22-841	21-737	21-533	21-981	22-366	22-006	21-601	21-491			



## XII.—FINANCE.

Under the general heading of Finance in Section XII are grouped statistics relating to the public accounts of the Dominion Government, including revenue and expenditure, public debt, assets and liabilities and inland revenue. Tables have been added showing the receipts and expenditure of each of the nine provincial governments of Canada, and these are followed by financial statistics of urban municipalities, of the Ontario Hydro Electric Power Commission, values of building permits and statistics of currency and banking, loan and trust companies, commercial failures, government annuities and insurance companies.

### DOMINION PUBLIC FINANCE.

**Historical Sketch.**—Both under the French *régime* and in the earlier part of the British, the territorial or casual revenues of Canada, consisting of certain seigniorial dues and the proceeds of the sale of government timber and land, were reserved to the Crown, while the right of levying taxes and of regulating the trade and commerce of the colony was deemed to be vested in the British Parliament.

By the Quebec Act of 1774, certain duties on spirits and molasses were imposed, to be expended by the Crown in order to provide a revenue "toward defraying the expenses of the administration of justice and the support of the civil government of the province." A little later, in 1778, the British Government by the Declaratory Act (18 Geo. V, c. 12), renounced forever the right of taxing the colonies to provide Imperial revenue, but maintained its claim to impose duties considered necessary for the regulation of trade, the proceeds to go towards defraying the expenditures of the colonial administration. After the Constitutional Act of 1791, the customs duties remained under the control of the Imperial Government, their revenue, as well as the territorial revenue above mentioned, coming in to the executive administration independently of the Legislative Assembly and thus making the executive power largely independent of the legislature. In case these revenues proved insufficient, recourse could generally be had to the grant made by the Imperial Government for the support of the army. As time went on, however, the Crown revenues became more and more inadequate to meet the increasing expenditure, while the wave of economy after 1815 in Great Britain made it impossible any longer to supplement these revenues from military sources. On the other hand, the purely provincial revenues collected under the authorization of the provincial legislature showed an increasing surplus. The power of the purse thus began to pass into the hands of the legislatures; in 1831 the British Parliament passed an Act placing the customs duties at the disposal of the legislatures.

Under the Act of Union a consolidated revenue fund was established. All appropriation bills were required to originate in the Legislative Assembly, which was forbidden to pass any vote, resolution or bill involving the expenditure of public money unless the same



had been first recommended by a written message of the Governor-General. The British Government surrendered all control of the hereditary or casual revenues, which were thenceforth paid into the treasury of the province to be disposed of as its legislature should direct.

At the interprovincial conferences which took place prior to Confederation it was decided that the new Dominion Government, which was to take over permanently as its chief source of revenue the customs and excise duties that had yielded the greater part of the revenues of the separate provinces, (direct taxation being as unpopular in British North America as in other new countries), was also to assume the provincial debts and to provide out of Dominion revenues definite cash subsidies for the support of the Provincial Governments. (See Tables 16 and 17.) Until the Great War, which made other taxes necessary, the customs and excise revenue constituted the chief resource of the Dominion Government for general purposes—the post office revenue and railway receipts which, properly speaking, are not taxes at all, being mainly or entirely absorbed by the expense of administering these services. Indeed, for many years preceding the war, customs and excise duties, together with the revenue secured by the head tax on Chinese immigrants, were the only items of receipts which were classified by the Department of Finance as taxes. In the last fiscal year of peace, these two items aggregated \$126,143,275 out of total receipts on consolidated fund account amounting to \$163,174,395, the post office and government railways furnishing between them \$26,348,847 of the remainder, offset, however, by expenditure on these two services amounting to \$27,757,196. Miscellaneous revenue, largely fees, amounted in that year to \$10,682,273—a comparatively small fraction of the total. As both customs and excise taxes were indirect, the average Canadian felt but little the pressure of taxation for Dominion purposes.

The war enormously increased the expenditure and this increase had in the main to be met by loans. It is, however, a cardinal maxim of public finance that where loans are contracted, sufficient new taxation should be imposed to meet the interest charge upon the loans and to provide a sinking fund for their ultimate extinction. This war taxation was begun in Canada within the first weeks of the war, when in the short war session of August, 1914, increases were made in the customs and excise duties on various commodities, including coffee, sugar, spirituous liquors and tobacco. In 1915 special additional duties of 5 p.c. ad valorem were imposed on commodities imported under the British Preferential Tariff and 7½ p.c. ad valorem on commodities imported under the Intermediate and General Tariff, certain commodities being exempted. New internal taxes were also imposed on bank circulation, on the income of trust and loan companies, on insurance other than life and marine companies, on telegrams and cablegrams, railway tickets, sleeping car berths, etc., also on cheques, postal notes, money orders, letters and post cards. In the following year the Business War Profits Tax (dropped

in 1921) was introduced, and in 1917 an Income Tax was imposed. In 1918 both of these taxes were increased and their application widened, and in 1919 the income tax was again increased, and still further augmented in 1920, by a surtax of 5 p.c. of the tax on incomes of \$5,000 and over; the sales tax was also introduced in that year. This sales tax was increased in 1921 and again in 1922. The cumulative result of these war taxes was that in the fiscal year ended Mar. 31, 1921, customs duties were for the first time displaced from their position as the chief factor in Canadian revenue, the war taxes yielding \$168,385,327 as against the customs yield of \$163,266,804. In the fiscal year recently closed, this fact is still more obvious, for war taxes yielded \$177,484,161, while the yield of customs duties fell to \$105,686,645. The income tax has contributed increasingly to the yield of war taxes, raising \$78,684,355 in the fiscal year ended Mar. 31, 1922, or approximately three-quarters of the yield from customs.

A more detailed sketch of the new taxation imposed during and following the war is appended for reference:—

**War Taxation in Canada.**—War taxation began in Canada almost simultaneously with the outbreak of the war. In the short war session of August, 1914, the Customs Tariff Amendment Act, (chap. 5) and an Act to amend the Inland Revenue Act, (chap. 6), provided for increases in the customs and excise duties on various commodities, including coffee, sugar, spirituous liquors and tobacco. In the 1915 session the Customs Tariff War Revenue Act, 1915, imposed duties or additional duties of 5 p.c. ad valorem under the British Preferential Tariff, and of 7½ p.c. ad valorem under the Intermediate and General Tariffs on all goods in Schedule A of the Customs Tariff, whether dutiable or free of duty, subject to exemptions of which the chief were, fish caught by Canadian and Newfoundland fishermen, goods used in the manufacture of agricultural machinery and of binder twine, certain goods used for medical and surgical purposes, anthracite coal, steel for the manufacture of rifles, silk, chemical fertilizers, cotton seed cake and cotton seed cake meal. By the Special War Revenue Act (chap. 8), new taxes were imposed as follows: on every bank, ¼ of 1 p.c. on the average amount of its notes in circulation during each three months period; on every trust and loan company, 1 p.c. on its Canadian income; on every insurance company other than life and marine insurance companies, 1 p.c. of its net premiums received in Canada. Further, taxes were imposed of 1 cent on every cablegram or telegram for which a charge of 15 cents or more was made; 5 cents on the first \$5 and 5 cents on every additional \$5 on railway and steamboat tickets to places in North America and the British West Indies, and on tickets to places outside of these, \$1 if the price exceeded \$10, \$3 if it exceeded \$40, and \$5 if it exceeded \$65; 10 cents on every sleeping car berth and 5 cents on every parlour car seat; all the foregoing taxes to be collected by the companies concerned and transmitted to the Government. The same act imposed the following stamp duties: 2 cents on every bank cheque and on every express and post office money order and 1 cent on every postal note, 2 cents on every bill of lading, 1 cent extra on every letter and post card, 1 cent for every 25 cents of the retail price of proprietary medicines and perfumery, 3 cents for a pint or less and 5 cents for every quart of non-sparkling wine, and 13 cents for ½ pint or less and 25 cents for every pint of sparkling wine.

By 1916 it was seen that still further taxation was required to maintain the finances of the Dominion in a satisfactory condition. As a result the Business Profits War Tax of that year (chap. 11), was passed, imposing a tax of 25 p.c. of the amount by which the profits earned in business owned by an incorporated company exceeded 7 p.c. per annum, or, in a business owned by any other person or association, exceeded 10 p.c. per annum upon the capital employed in the business. Businesses employing less than \$50,000 capital, life assurance companies, businesses engaged in farming and live stock raising, and businesses of which 90 p.c. or more

of the capital was owned by a province or a municipality were exempted, these exemptions not to apply to businesses engaged to the extent of 20 p.c. or over in manufacturing or dealing in munitions or war materials or supplies.

In the 1917 season the Business Profits War Tax was amended (chap. 6), to provide for a tax of 50 p.c. on profits in excess of 15 p.c. per annum, but not exceeding 20 p.c. per annum, and a tax of 75 p.c. on profits in excess of 20 p.c. per annum. In the same session the Income War Tax Act (chap. 28) imposed a tax of 4 p.c. on incomes exceeding \$2,000 in the case of unmarried men and widows and widowers without children, and on incomes exceeding \$3,000 in the case of other persons. A super-tax was also imposed, progressing from 2 p.c. on the amount by which an income exceeded \$6,000 but did not exceed \$10,000, up to 25 p.c. on the amount by which an income exceeded \$100,000.

In the session of 1918 the Business War Profits Tax Act was amended by chapter 10, extending the operation of the Act to businesses having a capitalization of from \$25,000 to \$50,000. The Income War Tax Act, as amended by chapter 25, lowered the limit of exemption to \$1,000 for unmarried persons and childless widows and widowers and to \$2,000 for other persons, the former paying 2 p.c. on incomes between \$1,000 and \$1,500, the latter 2 p.c. on incomes between \$2,000 and \$3,000. The normal tax remained at 4 p.c., but the supertax was increased on incomes exceeding \$200,000, being graduated up to 50 p.c. on incomes exceeding \$1,000,000. A surtax was also introduced, ranging from an additional 5 p.c. of the combined normal tax and super-tax on incomes between \$6,000 and \$10,000 to an additional 35 p.c. of the normal and super-tax on incomes exceeding \$200,000, corporations to pay a tax of 6 p.c. on incomes exceeding \$3,000, but no super-tax or surtax. By the Customs Tariff Amendment Act (chap. 17), increased duties were imposed on tea, coffee and tobacco, and by the Act to amend the Special War Revenue Act, 1915 (chap. 46), increased or new taxes were imposed as follows:—For each seat or berth in a parlour or sleeping car 10 cents and 10 p.c. of the price of the seat or berth; one cent on every hundred matches and 8 cents on every package of 54 or fewer playing cards with customs duties of the same amount on these articles when imported; 10 p.c. of the selling price on passenger automobiles, gramophones, etc., and records therefor, mechanical piano players and records therefor and jewellery.

In the 1919 session, the Business War Profits Tax was renewed (chap. 39) for the calendar year 1919: in the case of businesses having a capital between \$25,000 and \$50,000, profits in excess of 10 p.c. were now to be taxed 25 p.c., businesses having a capital of \$50,000 or more to be taxed at the same rate as in previous years. The Income War Tax Act was amended by chapter 55, which increased the general rate of taxation. All corporations paid 10 p.c. of their net income in excess of \$2,000, as against 6 p.c. under the former Act. In respect of individuals the normal rate of 4 p.c. was to be levied on all incomes exceeding \$1,000, but not exceeding \$6,000, in the case of unmarried persons and widows or widowers without dependent children, and upon all incomes exceeding \$2,000 but not exceeding \$6,000 in the case of all other persons, the respective minima of \$1,000 and \$2,000 being exempt from taxation. A normal tax of 8 p.c. was levied on the excess of all incomes over \$6,000. The surtax was imposed on a progressive scale on all incomes of over \$6,000, applying first at the rate of 1 p.c. on the amount by which the income exceeded \$5,000 and did not exceed \$6,000; then at the rate of 2 p.c. on the amount by which the income exceeded \$6,000 and did not exceed \$8,000; then at a rate increasing by 1 p.c. for each \$2,000 increase of income up to \$100,000, so that 48 p.c. was levied on the amount by which the income exceeded \$98,000 and did not exceed \$100,000; then at 52 p.c. on the amount by which the income exceeded \$100,000 and did not exceed \$150,000; 56 p.c. on the excess between \$150,000 and \$200,000; 60 p.c. on the excess between \$200,000 and \$300,000; 63 p.c. on the excess between \$300,000 and \$500,000; 64 p.c. on the excess between \$500,000 and \$1,000,000; 65 p.c. on the excess income over \$1,000,000. Chapter 47 provided for the entire repeal of the extra duty of 5 p.c. ad valorem added to the British Preferential Tariff under the Customs Tariff War Revenue Act, 1915, and for the partial repeal in respect of the intermediate and general tariff rates of the excess of 7½ p.c. imposed under the same Act; also for the free importation into Canada of wheat, wheat flour and potatoes from countries not imposing a customs duty on such articles when grown or produced in Canada. Five cents per lb.



was deducted from the duty on coffee roasted or ground under the preferential, intermediate and general tariff schedules and 3 cents per lb. was deducted from the duty on British grown teas under the preferential tariff. Under the general tariff the Act provided for a total reduction (including the  $7\frac{1}{2}$  p.c. war duty) from  $27\frac{1}{2}$  p.c. to 15 p.c. on cultivators, harrows, horseshoes, seed-drills, manure spreaders and weeders and complete parts thereof; from  $27\frac{1}{2}$  p.c. to  $17\frac{1}{2}$  p.c. on ploughs and complete parts thereof, windmills and complete parts thereof, portable engines and traction engines for farm purposes, horse-powers and threshing machine separators and appliances therefor. On hay-loaders, potato diggers, fodder or feed cutters, grain crushers, fanning mills, hay tedders, farm, road or field rollers, post-hole diggers, and other agricultural implements, provision was made for a reduction of duty to 20 p.c. with a similar reduction on farm wagons. Respecting cement, the war customs duty was repealed and the general tariff rate reduced to 8 cents per 100 lbs. Specific instead of ad valorem rates of duty were enacted for pig-lead, zinc spelter, and copper ingots.

In the session of 1920 chapter 36 amended the Business Profits War Tax Act by exempting from tax profits which during the year 1920 did not exceed 10 p.c. of the capital employed; upon profits exceeding 10 p.c. up to 14 p.c. there was a tax of 20 p.c. of the profits; from 15 to 20 p.c., a tax of 30 p.c.; from 20 to 30, a tax of 50 p.c.; exceeding 30, a tax of 60 p.c. In any business with a capital of \$25,000 to \$50,000, 20 p.c. tax was charged on the amount by which profits exceeded 10 p.c. of capital; this was also to apply in respect of the profits earned in 1917, 1918 and 1919 on businesses having capital less than \$50,000 if 20 p.c. or more of such profits had been derived from business carried on for war purposes. Chapter 49 amended the Income War Tax Act of 1917 in the following particulars: (1) empowering the minister to determine deficits and losses; (2) taxing dividends or shareholders' bonuses; (3) taxing income from an estate or accumulating on trust; (4) increasing by 5 p.c. tax and surtax on incomes of \$5,000 or more; (5) requiring that one-quarter tax be forwarded with return, the balance being payable, if desired, by 3 bimonthly instalments with interest at 6 p.c.; (6) imposing severe penalties for default. Chapter 71 amended the Special War Revenue Act of 1915 by imposing a stamp tax on bills and notes, bank statements, overdrafts, bank cheques, sale or transfers of stock, etc.; also by imposing new excise taxes on certain classes of goods, ranging from 3 p.c. to 50 p.c. according to use or value of the goods, and specific duties on certain fluids. In addition, a tax of 1 p.c. was imposed upon wholesale and manufacturers' sales.

In the session of 1921, the excise duties on spirits were increased from a basic rate of \$2.40 per proof gallon to a basic rate of \$9.00 per proof gallon, the old rates being continued, however, where the spirits were used by licensed manufacturers of patent and proprietary medicines, extracts, essences and pharmaceutical preparations. Under chapter 50 the tax on sales and deliveries by manufacturers and wholesalers and jobbers was raised from 1 p.c. to  $1\frac{1}{2}$  p.c. and in the case of sales by manufacturers directly to retailers and customers from 2 p.c. to 3 p.c. Where goods were imported the rates under similar circumstances were raised from 2 p.c. to  $2\frac{1}{2}$  and 4 p.c. respectively.

Summary statistics of the war tax revenue from 1915 to 1921 are given in Table 5 and detailed statistics of the war tax revenue collected by the Inland Revenue Department from 1921 in Table 6. In Table 7 are furnished statistics of the yield of the income tax by provinces for the years 1919 to 1921.

**National Debt.**—The gross national debt of Canada on Mar. 31, 1914, was \$544,391,369, as against assets of \$208,394,519, leaving a net debt of \$335,996,850. Comparatively small as was this debt, it was a debt incurred almost altogether either for public works of general utility which, like the Intercolonial and Transcontinental railways and the canal system, remained assets, though perhaps not realizable assets of the nation, or was expended as subsidies to enterprises, which, like the Canadian Pacific Railway, though not government owned, assisted greatly in extending the area of settlement



as well as the productive and therefore the taxable capacity of the country. Broadly speaking, it was a debt incurred for productive purposes. Also, it was mainly held outside the country, the principal of the Dominion funded debt payable on Mar. 31, 1914, in London being \$302,842,485, as against only \$717,453 payable in Canada.

The great changes brought about by the war in our national debt have been (1) the enormous increase in net debt from \$335,996,850 to \$2,422,135,801; (2) as having been largely incurred for war purposes, the gross debt is not represented by corresponding assets; (3) the debt is now mainly held in Canada; (4) the average rate of interest paid on interest-bearing debt has been considerably increased, the interest-bearing debt on Mar. 31, 1914, being \$416,892,576, with an annual interest charge of \$14,687,797, the average interest rate being thus only 3.52 p.c., while on Mar. 31, 1922, the interest-bearing debt was \$2,676,284,300, with an interest charge of \$138,190,400, the average rate of interest paid thus being 5.16 p.c. Had it been possible to keep down the rate of interest to its pre-war level, the debt charge would be nearly \$44,000,000 less than it is. Post-war conversions of debt to lower rates of interest are likely to reduce substantially our annual interest payments within the next few years.

A summary account of the loans effected since 1914 is appended.

**War Loans.**—The first Dominion domestic war loan was raised on November, 1915, under authority of chapter 23 of the Statutes of that year (5 Geo. V, c. 23). It originally consisted of \$50,000,000 5 p.c. tax-exempt 10 year gold bonds, issued at 97½ and maturing December 1, 1925. As the issue was heavily over-subscribed (public subscriptions by 24,862 subscribers \$78,729,500, bank subscriptions \$25,000,000) and the extra money was needed, the Government increased the amount of the loan to \$100,000,000. In July, 1915, \$25,000,000 of 1 year and \$20,000,000 of 2 year 5 p.c. notes had been floated in the United States, with the object of stabilizing exchange and of relieving the pressure on London.

In September, 1916, the second Canadian domestic war loan of \$100,000,000 5 p.c. tax exempt 15 year gold bonds was issued and again over-subscribed (public subscriptions by 34,526 subscribers \$151,444,800, bank subscriptions \$50,000,000). In March of that year, a loan of \$75,000,000 in 5, 10 and 15 year 5 p.c. bonds had been floated in New York.

The third Canadian domestic war loan, composed of \$150,000,000 5 p.c. tax exempt 20 year gold bonds issued at 96, was issued in March, 1917, and was again over-subscribed, 40,800 public subscribers applying for \$200,768,000, while the banks subscribed \$60,000,000. In August, 1917, \$100,000,000 of 5 p.c. 2 year notes were issued in New York at 98.

Hitherto the process of raising money had been comparatively easy. The buoyancy of Canadian finance was illustrated by the increasing subscriptions to

each successive loan, while the Government could, when needed, obtain additional funds in New York. In April, 1917, however, the United States entered the war. Its gigantic preparations drained enormous sums of money from the New York money market, and made it difficult for other countries to raise money there. Henceforth Canada had in the main to depend on her own people to supply the funds necessary for keeping her steadily increasing forces in the field. Subsequent appeals for war loan subscriptions had to be made to the masses of the people rather than to the comparatively few wealthy or comfortably-off investors.

The fourth domestic war loan (First Victory Loan) issued in November, 1917, illustrates the foregoing remarks. For the first time subscriptions as low as \$50 were received toward an issue of \$150,000,000 5½ p.c. 5, 10 and 20 year gold bonds, the Minister of Finance reserving the right to allot the whole or any part of the amount subscribed in excess of \$150,000,000. The subscribers numbered 820,035 and the subscriptions totalled \$398,000,000, or about \$50 per head of the population of Canada.

The fifth domestic war loan (Second Victory Loan) of \$300,000,000 5½ p.c. 5 and 15 year tax exempt gold bonds was issued at 100 and interest as of date November 1, 1918, and the end of the war, then clearly in sight, stimulated public subscriptions. The applications numbered 1,067,879 and totalled \$660,000,000.

The sixth domestic war loan (Third Victory Loan) was raised at 100 and interest in November, 1919. It consisted of \$300,000,000 taxable 5 year and 15 year 5½ p.c. gold bonds. The subscriptions amounted to \$678,000,000.

The general result of these loans has been that in 1921, the great bulk of the Canadian national debt is owing to the Canadian people. At the end of the fiscal year 1920-21, the Dominion net funded debt payable in London was officially stated as \$310,334,996, in New York as \$135,874,000, while the net funded debt payable in Canada amounted to no less than \$1,988,494,357. The largest creditors of the Dominion Government are within the Dominion itself, and as a consequence the interest payments made on National Debt account outside the country are a relatively small item. Detailed statistics of the national debt as on Mar. 31, 1921, are given in Table 14.

**Balance-Sheet.**—A summary review of the financial situation of the Dominion as on Mar. 31, 1921, is given in the balance sheet reproduced from pages 2 and 3 of the Public Accounts, 1921 (Table 1). This shows the gross debt on the above date to have been \$2,902,482,117, offset by available assets aggregating \$561,603,133, leaving a net debt of \$2,340,878,984.<sup>1</sup> Non-available assets, including such public works as canals and railways, also loans to railways, amount in the aggregate to \$1,225,377,222, leaving a debit balance on Consolidated Fund Account on Mar. 31, 1921, of \$1,115,501,762. The details of the various assets and liabilities are contained in the schedules accompanying the balance sheet and printed in the Public Accounts.

<sup>1</sup>The net debt on March 31, 1922, was \$2,422,135,801. See page 659.

## 1.—Balance Sheet of the Dominion of Canada, as at March 31, 1921.

(From the Public Accounts).

ASSETS—		LIABILITIES—	
Cash on hand and in banks.....	\$ 50,177,300	Dominion Notes in circulation.....	\$ 277,882,885
Specie Reserve.....	83,499,873	Bank Circulation Redemption Fund.....	6,311,493
Advances to Provinces, Banks, etc.....	138,705,097	Post Office Account—Money Orders, Postal Notes, etc., Outstanding.....	2,610,884
Advances to Imperial and Foreign Governments.....	187,408,305	Savings Bank Deposits.....	39,160,808
Soldier Land Settlement Loans.....	69,366,217	Insurance and Superannuation Funds.....	14,348,165
Miscellaneous Current Accounts.....	31,986,341	Trust Funds.....	17,642,642
		Contingent Funds.....	1,563,900
		Province Accounts.....	9,624,153
		Miscellaneous Current Accounts.....	2,680,646
		Temporary Loans.....	90,855,000
		Funded Debt.....	2,434,703,353
		Interest due and unpaid.....	5,079,189
Balance, being Net Debt March 31, 1921 (exclusive of interest accrued and outstanding) carried forward.....	2,340,878,984		\$ 2,902,482,117
	\$ 2,340,878,984		
		Balance Net Debt March 31, 1921, brought forward.....	\$ 2,340,878,984

NOTE.—The Dominion of Canada is also responsible for principal and interest on loans negotiated by Railways under various Acts of Parliament amounting to \$222,895,613.

Total to March 31, 1921.....

\$ 2,340,878,984

**Receipts and Disbursements.**—The total receipts on Consolidated Fund account for the fiscal year ended Mar. 31, 1921, were \$434,386,537, an increase of \$84,640,202 over the preceding year; besides this, special receipts amounted to \$1,905,648. The regular expenditure on consolidated fund account was \$361,118,145, but special expenditures amounting to \$17,489,592 were also charged to this account. There was also an expenditure on capital account of \$40,012,807, while advances to railways were made aggregating \$109,662,655—as well as miscellaneous advances aggregating \$335,000. Thus the total disbursements, exclusive of these advances, amounted to \$418,620,544, or inclusive of the advances to \$528,618,199, resulting in an addition, after certain readjustments had been made as between available and non-available assets, of \$92,010,360 to the net debt (gross debt less available assets).<sup>1</sup>

For the fiscal year ended Mar. 31, 1922, the total receipts on consolidated fund account were \$381,952,387, a decline of \$52,434,150 from 1921. Expenditure on consolidated fund account was also lower at \$347,560,691, a decline of \$13,557,454. The surplus of receipts over expenditure on consolidated fund account was therefore \$34,391,696.

Detailed statistics of receipts and expenditures on consolidated fund account are contained in Tables 3 and 4, statistics of war tax revenues in Tables 5 to 7. Tables 8 and 9 are historical tables giving the figures of the main items of Dominion receipts and expenditure since Confederation, while Table 10 shows the per capita receipts and expenditure for these years according to census and estimated populations.

**Public Debt.**—On March 31, 1922, the gross debt of the Dominion was \$2,902,347,137, which, after active assets amounting to \$480,211,336 are deducted, leaves a net debt of \$2,422,135,801. The gross interest charge for the year was \$135,247,849, which, after interest amounting to \$21,961,513 had been received on the assets, leaves a net interest charge of \$113,286,336 (Table 11). The details of the assets and liabilities are published in Tables 12 to 14, while Table 15 gives a historical conspectus of the growth of the public debt since Confederation.

## 2.—Receipts and Disbursements, 1918-1922.

### RECEIPTS.

Items.	1918.	1919.	1920.	1921.	1922.
<b>Consolidated Fund Receipts—</b>	\$	\$	\$	\$	\$
Customs.....	144,172,630	147,169,188	168,796,823	163,266,804	105,686,645
Excise.....	27,168,445	30,342,034	42,698,083	37,118,367	36,755,206
War tax.....	25,379,901	56,177,508	82,079,802	168,385,327	177,484,161
Post office.....	21,345,394	21,603,542	24,471,709	26,706,198	26,402,299
Railways.....	27,172,208	37,967,551	2	2	2
Dominion Lands.....	4,443,758	3,539,927	4,622,592	3,955,326	2,799,450
Interest on investments.....	4,466,724	7,421,002	17,086,981	24,815,246	21,961,013
Other items.....	6,629,893	8,725,995	9,990,345	10,139,269	10,863,113
<b>Total Consolidated Fund Receipts.....</b>	<b>260,778,953</b>	<b>312,946,747</b>	<b>349,746,335</b>	<b>434,386,537</b>	<b>381,952,387</b>
<b>Special Receipts—</b>					
Miscellaneous Revenue.....	—	—	—	1,905,648	310,184
<b>Total Receipts.....</b>	<b>260,778,953</b>	<b>312,946,747</b>	<b>349,746,335</b>	<b>436,292,185</b>	<b>382,262,571</b>

<sup>1</sup>While the disbursements here given amount to \$92,326,014 more than the receipts, adjustments as between available and non-available assets increased the available assets by \$315,654, thus diminishing the net debt by that amount.

<sup>2</sup>Railway Revenue for the fiscal years 1920-22 was transferred and applied against railway working expenses.



## 2.—Receipts and Disbursements, 1918-1922—concluded.

## DISBURSEMENTS.

Items.	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
<b>Consolidated Fund Expenditure—</b>					
Charges on debt <sup>1</sup> .....	51,517,790	80,185,604	108,989,747 <sup>2</sup>	140,653,607 <sup>2</sup>	139,357,449 <sup>2</sup>
Subsidies to Provinces.....	11,369,148	11,327,236	11,490,860	11,490,860	12,211,924
Collection of revenue.....	61,977,921	73,682,985	41,219,680	43,740,040	49,217,080
Militia and Defence.....	3,912,459	3,253,876	4,616,782	9,893,863	11,017,533
Pensions.....	8,155,691	18,282,440	26,004,461	37,420,751	36,153,031
Civil government.....	6,890,952	7,234,897	7,782,330	8,784,178	9,968,932
Public Works (Income).....	7,432,901	6,295,600	9,016,246	10,846,875	10,574,364
Soldiers' Civil Re-establishment.....	—	—	45,869,064	35,174,788	17,147,351
Other items.....	27,027,451	32,469,185	48,854,760	63,113,183	61,913,024
<b>Total.....</b>	<b>178,284,313</b>	<b>232,731,283</b>	<b>303,843,930</b>	<b>361,118,145</b>	<b>347,560,691</b>
Surplus (+).....	+ 82,494,640	+ 80,215,464	+ 45,902,405	+ 73,268,392	+ 34,391,696
<b>Special Disbursements—</b>					
Capital Expenditure.....	43,111,903	25,031,266	69,301,878	40,012,807	16,295,332
Railway Subsidies.....	720,405	43,805	334,845	—	—
War and Demobilization.....	343,836,802	446,519,440	346,612,955	16,997,544	1,544,250
Other Charges.....	10,706,787	— 7,283,582	19,995,313	492,048	301,518
<b>Grand Total Disbursements.....</b>	<b>576,660,210</b>	<b>697,042,212</b>	<b>740,088,921</b>	<b>418,620,544</b>	<b>365,701,791</b>
Advances to Railways.....	—	—	45,780,690	109,997,655 <sup>3</sup>	97,950,645

<sup>1</sup>Includes charges of management, interest, sinking funds and premium, discount and exchange.  
<sup>2</sup>Sinking funds now included in special account. <sup>3</sup>Includes \$335,000 Miscellaneous Advances.

## 3.—Detailed Receipts on Consolidated Fund Account, 1918-1922.

Items.	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Canada Gazette.....	32,007	29,414	50,325	61,468	77,830
Canals.....	411,868	387,655	441,926	365,941	804,516
Casual.....	2,362,263	2,910,190	3,731,725	4,005,183	4,212,862
Chinese Revenue.....	208,966	2,026,669	132,133	240,107	394,932
Civil Service Examination Fees.....	4,208	11,568	6,394	4,877	2,641
Customs.....	1,342	1,229	1,273	2,070	—
Cullers' Fees.....	144,172,630	147,169,188	168,796,823	163,266,804	105,686,645
Customs.....	4,443,758	3,539,927	4,622,592	3,955,326	2,799,450
Dominion Lands.....	9,581	13,621	13,181	4,051	269
Dominion Steamers.....	79,920	88,071	115,859	140,474	139,831
Electric Light Inspection.....	27,168,445	30,342,034	42,698,083	37,118,367	36,755,207
Excise.....	100,336	228,815	628,793	501,448	265,153
Fines and Forfeitures.....	114,572	123,114	336,591	297,797	224,157
Fisheries.....	56,319	55,701	61,694	70,987	81,720
Gas Inspection.....	1,499,876	1,082,070	1,092,606	1,483,278	1,937,323
Inspection of Staples.....	58,763	64,684	62,384	89,505	95,735
Insurance Inspection.....	4,466,724	7,421,002	17,086,981	24,815,246	21,961,513
Interest on Investments.....	8,902	8,628	7,490	9,423	5,199
Law Stamps.....	612	335	621	612	—
Lighthouse and Coast Service.....	63,636	69,244	78,227	87,601	131,727
Mariners' Fund.....	18,228	35,955	—	—	—
Militia.....	39,177	54,428	53,599	70,107	67,815
Military College.....	26,903	23,841	47,979	139,385	132,188
Militia Pension Revenue.....	4,179	—	—	—	—
Modus Vivendi.....	7,930	4,819	9,835	8,878	8,438
Ordnance Lands.....	256,317	275,709	354,497	407,887	454,886
Patent Fees.....	71,228	132,958	130,843	162,710	143,070
Penitentiaries.....	21,345,394	21,603,542	24,471,709	26,706,198	26,402,299
Post Office.....	628,253	532,849	1,974,072	1,116,581	781,224
Premium, Discount and Exchange.....	384,022	396,664	479,088	503,053	490,056
Public Works.....	27,172,208	37,967,551	—	—	—
Railways.....	—	—	—	—	—
Royal N.W.M. Police Officers' Pensions.....	5,083	4,030	5,586	6,469	6,175
Steamboat Inspection.....	2,793	2,775	4,594	72,704	117,548
Superannuation Fund.....	29,947	26,069	21,986	22,086	18,511
Supreme and Exchequer Court Reports.....	78	—	—	—	—
War Tax.....	25,379,901	56,177,508	82,079,801	168,385,327	177,484,161
Weights and Measures.....	139,584	134,890	147,045	264,587	269,806
<b>Total.....</b>	<b>260,778,953</b>	<b>312,946,747</b>	<b>349,746,335</b>	<b>434,386,537</b>	<b>381,952,387</b>

<sup>1</sup>See foot note (2) on page 659.

## 4.—Detailed Expenditure on Consolidated Fund Account, 1918-1922.

Items.	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Air Board.....	—	—	—	1,351,212	1,624,843
Administration of Justice.....	1,485,390	1,495,688	1,641,122	2,009,240	2,151,956
Adulteration of Food, etc.....	46,643	44,621	44,987	59,860	79,999
Arts and Agriculture.....	3,846,018	3,884,929	4,783,083	5,489,384	5,805,900
Bounties.....	113,497	270,802	352,558	149,202	100,140
Charges of Management.....	488,707	723,336	875,645	992,374	806,926
Civil Government.....	6,890,952	7,234,897	7,782,330	8,784,178	9,968,932
Culling Timber.....	6,046	4,625	4,338	3,078	517
Customs and Excise.....	5,309,326	5,426,282	5,955,374	6,615,202	6,657,572
Department of Mines.....	380,762	392,018	566,175	595,261	608,029
Dominion Lands.....	2,552,304	2,247,997	4,751,780	3,956,027	4,226,070
Dominion Police.....	128,966	148,489	151,588	1	1
Excise.....	1,255,006	1,151,489	1,283,694	1,544,512	—
Fisheries.....	1,111,277	1,027,150	1,215,082	1,385,102	1,343,136
Government of N.W. Territories.....	5,810	4,963	3,979	29,146	156,195
Health.....	—	—	—	238,774	255,472
Immigration.....	1,211,954	1,112,079	1,388,185	1,688,961	1,636,597
Indians.....	1,922,761	1,971,172	2,351,969	2,410,073	2,944,037
Inspection of Staples.....	2,240	2,353	2,320	2,598	2,345
Interest on Public Debt.....	47,845,585	77,431,432	107,527,089	139,551,520	135,247,849
Labour.....	75,264	166,260	648,713	1,421,969	1,645,540
Legislation.....	3,073,534	1,766,401	2,617,581	2,343,201	3,870,450
Lighthouse and Coast Service.....	1,860,309	1,911,247	2,120,005	2,263,118	2,280,766
Mail Subsidies and Steamboat Sub- ventions.....	1,853,320	1,391,850	1,632,906	1,094,509	1,105,896
Marine Hospitals.....	53,169	74,291	90,112	77,546	91,177
Militia.....	3,912,459	3,253,876	4,616,782	9,893,863	11,017,533
Miscellaneous.....	2,354,496	9,515,936	15,090,383	19,938,768	13,577,625
Naval Service.....	1,069,573	792,182	1,168,438	3,284,911	3,183,753
Ocean and River Service.....	1,192,674	1,365,199	1,558,502	2,021,930	1,684,389
Penitentiaries.....	980,168	1,007,586	1,022,330	1,296,952	1,527,451
Pensions.....	8,155,691	18,282,440	26,004,461	37,420,751	36,153,031
Post Office.....	18,046,558	19,273,758	20,774,312	22,696,561	28,121,425
Premium, Discount and Exchange.....	5	582,340	587,013	109,713	3,302,674
Public Works, Collection of Revenue.....	842,648	877,472	921,619	1,113,876	1,073,304
Public Works, Income.....	7,432,901	6,295,060	9,016,246	10,846,875	10,574,364
Quarantine.....	239,451	227,389	222,506	262,498	261,355
Railways and Canals, Collection of Revenue.....	34,849,608	45,494,584	8,418,624	8,886,458	8,624,094
Railways and Canals, Income.....	444,629	559,695	1,184,832	2,934,424	5,311,715
Royal C. M. Police.....	1,031,157	719,143	3,386,389	3,927,799	2,962,442
Scientific Institutions.....	361,593	375,575	464,450	587,892	624,380
Sinking Funds.....	3,183,493	1,448,495	2	2	2
Soldiers' Civil Re-establishment.....	—	—	45,869,064	35,174,788	17,147,351
Soldiers' Land Settlement.....	—	207,559	2,886,156	3,454,210	2,125,874
Steamboat Inspection.....	70,381	72,874	82,634	97,704	103,670
Subsidies to Provinces.....	11,369,148	11,327,236	11,490,860	11,490,860	12,211,924
Superannuation.....	478,264	495,017	517,245	554,510	603,116
Superannuation No. 3.....	—	—	—	80,520	69,246
Superannuation No. 4.....	—	—	—	54,541	435,838
Trade and Commerce.....	1,381,621	1,330,449	1,502,712	1,880,943	3,679,146
Weights, Measures, Gas and Electric Light.....	322,549	311,293	346,327	406,380	431,754
Yukon Provisional District.....	301,612	183,243	205,124	189,483	142,916
<b>Total.....</b>	<b>178,284,313</b>	<b>232,731,283</b>	<b>303,843,930</b>	<b>361,118,145</b>	<b>347,560,691</b>

<sup>1</sup>Now included with Royal C. M. Police.<sup>2</sup>Now included in special account.

NOTE.—Adulteration of Food, Marine Hospitals and Quarantine, have been classified in the public accounts of 1921 and 1922 under the heading "Health," but are here deducted, so as not to break the continuity of the table.

## 5.—War Tax Revenue during the fiscal years ended March 31, 1915-1921.

Year.	Banks.	Trust and Loan Companies.	Insurance Companies.	Business Profits.	Income Tax.	Inland Revenue Department <sup>1</sup> .	Total War Tax Revenue.
	\$	\$	\$	\$	\$	\$	\$
1915.....	—	—	—	—	—	98,057	98,057
1916.....	1,300,447	324,250	459,247	—	—	1,536,838	3,620,782
1917.....	1,114,023	202,415	419,699	12,506,517	—	2,059,584	16,302,236
1918.....	1,115,758	269,129	496,540	21,271,084	—	2,227,390	25,379,901
1919.....	1,099,764	323,340	546,114	32,970,062	9,349,720	11,888,508	56,177,508
1920.....	1,170,223	274,216	638,731	44,145,184	20,263,740	15,587,707	82,079,801
1921.....	1,257,534	293,802	807,667	40,841,401	46,381,824	78,803,099	168,385,327
<b>Total.....</b>	<b>7,057,749</b>	<b>1,687,152</b>	<b>3,367,998</b>	<b>151,734,248</b>	<b>875,995,284</b>	<b>112,201,183</b>	<b>352,043,614</b>

<sup>1</sup>Amounts paid in to Receiver-General.

## 6.—War Tax Revenue collected by the Inland Revenue Department, by Provinces, during the fiscal year ended March 31, 1921.

(Accrued Revenue).

Provinces.	Stamps.	Licenses.	Auto-mobiles.	Tea.	Jewellery.	Records.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	18,533	1,526	—	—	2,048	—
Nova Scotia.....	170,602	8,050	—	1,014	34,207	—
New Brunswick.....	150,797	5,686	75,537	192	18,064	—
Quebec.....	1,288,542	46,304	370,096	2,197	238,096	178,956
Ontario.....	2,498,461	80,040	5,333,683	832	456,473	39,500
Manitoba.....	651,754	11,267	522,978	22	129,897	—
Saskatchewan.....	282,260	8,002	55,448	—	38,597	—
Alberta.....	357,570	6,779	96,385	—	37,074	—
British Columbia.....	456,829	11,310	38,186	72	88,989	—
Yukon.....	2,155	116	—	—	731	1
<b>Totals.....</b>	<b>5,877,503</b>	<b>179,080</b>	<b>6,492,313</b>	<b>4,329</b>	<b>1,044,176</b>	<b>218,457</b>

Provinces.	Sales.	Mechanical Piano Players.	Matches.	Playing Cards.	Phonographs.	Moving Picture Films.	Confectionery.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	33,129	—	—	—	—	127	543
Nova Scotia.....	620,571	269	—	16	4,065	2,208	139,166
New Brunswick.....	461,053	—	—	5	1	1,311	122,255
Quebec.....	9,033,973	9,259	210,938	30,881	33,510	6,133	176,884
Ontario.....	13,958,514	58,357	2,574,303	218,127	285,628	17,607	708,052
Manitoba.....	1,648,480	—	—	—	11,447	3,302	83,915
Saskatchewan.....	358,263	—	—	—	2	2,582	15,189
Alberta.....	557,883	—	—	492	15	3,016	27,671
British Columbia.....	1,237,288	—	2,234	651	90	3,287	46,274
Yukon.....	748	—	1,475	68	—	51	6
<b>Totals.....</b>	<b>27,909,902</b>	<b>67,885</b>	<b>2,788,950</b>	<b>250,240</b>	<b>334,758</b>	<b>39,624</b>	<b>1,319,955</b>

Provinces.	Boats, etc.	Cameras.	Chewing Gum.	Pianos.	Organs.	Musical instruments (n.o.p.)	Fire-arms, Shells, etc.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	—	—	—	—	—	—	—
Nova Scotia.....	11	—	25	5,652	520	—	—
New Brunswick.....	845	—	—	—	—	—	—
Quebec.....	171	—	—	27,521	—	—	15,763
Ontario.....	11,539	26,947	43,721	110,216	2,026	568	159
Manitoba.....	2	—	835	—	—	—	106
Saskatchewan.....	—	—	—	—	—	—	—
Alberta.....	—	—	—	—	—	—	—
British Columbia.....	544	—	405	—	—	—	—
Yukon.....	—	—	1	—	—	—	15
<b>Totals.....</b>	<b>13,112</b>	<b>26,947</b>	<b>44,987</b>	<b>143,389</b>	<b>2,546</b>	<b>568</b>	<b>16,043</b>

**6.—War Tax Revenue collected by the Inland Revenue Department, by Provinces, during the fiscal year ended March 31, 1921—concluded.**

(Accrued Revenue.)

Provinces.	Fines.	Chandel- iers, Gas and Elec. fixtures.	Wines.	Ale, Beer.	Whiskey.	Perforat- ors.	Totals.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	100	13	—	—	—	2	56,021
Nova Scotia.....	1,000	4	—	9,805	9,173	38	1,006,397
New Brunswick.....	—	—	—	11,523	23,481	52	870,802
Quebec.....	6,956	5,172	5,837	3,900,089	1,412,757	270	17,000,304
Ontario.....	3,161	10,323	66,596	555,985	1,989,090	550	29,050,457
Manitoba.....	550	44	263	142,014	156,803	188	3,363,867
Saskatchewan.....	1,651	—	—	16,091	4,824	26	782,935
Alberta.....	625	—	—	127,955	55,470	—	1,270,936
British Columbia....	1,250	210	—	179,420	36,001	168	2,103,208
Yukon.....	—	—	—	—	—	—	5,367
<b>Totals.....</b>	<b>15,293</b>	<b>15,766</b>	<b>72,696</b>	<b>4,942,882</b>	<b>3,687,599</b>	<b>1,294</b>	<b>55,510,294</b>

Importations—Sales.....	\$ 10,218,161
Excise.....	9,839,608
Transportation.....	2,633,306
Embossed cheques.....	1,145,446

Grand Totals..... \$ 79,346,815

War tax refunds..... 526,331

Net war tax revenue collected by the Inland Revenue Department..... 78,820,484

**7.—Income Tax collected, by Provinces, 1919-1921.**

Provinces.	1919.	1920.	1921.
	\$ cts.	\$ cts.	\$ cts.
Nova Scotia <sup>1</sup> .....	249,093 24	506,993 06	1,194,345 11
New Brunswick.....	193,028 91	333,370 98	701,463 53
Quebec.....	2,543,896 82	7,246,246 21	15,657,074 07
Ontario <sup>2</sup> .....	4,459,939 60	8,182,736 93	20,013,796 86
Manitoba <sup>3</sup> .....	740,610 77	1,871,387 86	3,962,734 88
Saskatchewan.....	171,836 81	478,244 38	1,193,556 63
Alberta.....	457,960 59	636,248 72	1,398,998 32
British Columbia.....	520,617 52	995,433 92	2,237,711 21
Yukon.....	6,434 77	13,757 37	21,246 03
<b>Total Income Tax.....</b>	<b>9,343,419 03</b>	<b>20,264,419 43</b>	<b>46,381,806 64</b>
Business profits war tax.....	32,970,061 81	44,145,184 48	43,841,401 25
<b>Total Income and Business Profits Tax.....</b>	<b>42,313,480 84</b>	<b>64,409,603 91</b>	<b>87,223,207 89</b>

<sup>1</sup>Includes amounts received from taxpayers resident in the Province of Prince Edward Island. <sup>2</sup>Includes amounts received from taxpayers resident in the Province of Quebec west of the County of Argenteuil, as the collection in that territory can be more economically and advantageously handled by the district office at Ottawa. <sup>3</sup>During 1919 and 1920 included amounts received from taxpayers resident in the Province of Ontario west of Algoma.



## 8.—Principal Items of Dominion Expenditure, 1868-1922.

Fiscal years.	Interest on debt.	Charges of management, premium, discount and exchange.	Pensions.	Public works.	Railways and canals.	Subsidies to provinces.	Post office.	Total Expenditure chargeable to Consolidated Fund.
	\$	\$	\$	\$	\$	\$	\$	\$
1868.....	4,501,568	359,190	56,422	126,270	581,503	2,753,966	616,802	13,486,093
1869.....	4,907,014	465,657	50,564	65,015	641,814	2,604,050	787,886	14,038,084
1870.....	5,047,054	339,999	53,586	120,031	743,070	2,588,605	808,623	14,345,510
1871.....	5,165,304	426,655	52,611	597,275	752,772	2,624,940	815,471	15,623,082
1872.....	5,257,231	346,413	62,251	839,786	913,236	2,930,113	929,609	17,589,469
1873.....	5,209,206	178,644	49,204	1,297,999	1,378,164	2,921,400	1,067,866	19,174,648
1874.....	5,724,436	264,685	56,454	1,778,916	2,260,820	3,752,757	1,387,270	23,316,317
1875.....	6,590,790	227,201	63,657	1,756,010	1,981,893	3,750,962	1,520,861	23,713,071
1876.....	6,400,902	208,149	110,201	1,948,242	1,897,283	3,690,355	1,622,827	24,488,372
1877.....	6,797,227	207,875	112,531	1,262,823	2,239,346	3,655,851	1,705,312	25,519,302
1878.....	7,048,884	192,087	105,842	997,470	2,374,314	3,472,808	1,724,939	23,503,158
1879.....	7,194,734	277,923	107,795	1,013,023	2,570,361	3,442,764	1,784,424	24,455,382
1880.....	7,773,869	289,055	102,889	1,046,342	2,226,456	3,430,846	1,818,271	24,850,634
1881.....	7,594,145	225,444	96,389	1,108,815	2,603,717	3,455,518	1,876,658	25,502,554
1882.....	7,740,804	195,044	101,197	1,342,000	2,755,833	3,530,999	1,980,567	27,067,104
1883.....	7,668,553	234,170	98,446	1,765,256	3,117,465	3,606,673	2,176,089	28,730,157
1884.....	7,700,181	229,906	95,543	2,908,852	3,122,103	3,603,714	2,312,965	31,107,706
1885.....	9,419,482	387,495	89,879	2,302,363	3,268,222	3,959,327	2,488,315	35,037,060
1886.....	10,137,009	346,921	88,819	2,046,552	3,339,670	4,182,526	2,763,186	39,011,612
1887.....	9,682,929	287,742	102,109	2,133,316	3,673,894	4,169,341	2,818,907	35,657,680
1888.....	9,823,313	343,592	120,334	2,162,116	4,160,332	4,188,514	2,889,729	36,718,495
1889.....	10,148,932	273,590	116,030	2,299,231	4,095,301	4,051,428	2,982,321	36,917,835
1890.....	9,656,841	250,409	107,391	1,972,501	4,362,200	3,904,922	3,074,470	35,994,031
1891.....	9,584,137	262,068	103,850	1,937,546	4,505,516	3,903,757	3,161,676	36,343,568
1892.....	9,763,978	183,938	92,457	1,627,851	4,337,877	3,935,914	3,316,120	36,765,894
1893.....	9,806,888	213,794	90,309	1,927,832	3,848,404	3,935,765	3,421,203	36,814,053
1894.....	10,212,596	180,975	86,927	2,033,955	3,760,550	4,206,655	3,517,261	37,585,025
1895.....	10,466,294	178,179	84,349	1,742,317	3,704,126	4,250,675	3,593,647	38,132,005
1896.....	10,502,430	248,575	86,080	1,299,769	3,826,226	4,235,664	3,665,011	36,949,142
1897.....	10,645,663	315,314	90,882	1,463,719	3,725,690	4,238,059	3,789,478	38,349,760
1898.....	10,516,758	199,887	96,187	1,701,313	4,049,275	4,237,372	3,575,412	38,832,526
1899.....	10,855,112	173,257	96,129	1,902,664	4,246,404	4,250,636	3,603,799	41,903,500
1900.....	10,699,645	227,194	93,453	2,289,889	5,244,301	4,250,608	3,758,015	42,975,279
1901.....	10,807,955	201,861	93,551	3,386,632	6,377,961	4,250,607	3,931,446	46,866,368
1902.....	10,975,935	263,250	83,305	4,221,294	6,508,477	4,402,098	4,023,637	50,759,392
1903.....	11,068,139	294,968	87,925	4,065,553	7,221,705	4,402,503	4,105,178	51,691,903
1904.....	11,128,637	288,984	115,495	4,607,330	8,397,434	4,402,292	4,347,541	55,612,833
1905.....	10,630,115	276,072	140,424	6,765,446	9,803,912	4,516,038	4,634,528	63,319,683
1906.....	10,814,697	346,902	179,023	7,484,716	8,779,678	6,726,373	4,921,577	67,240,641
1907.....	6,712,771	244,548	125,832	5,520,571	7,011,858	6,745,134	3,979,557	51,542,161
1908.....	10,973,597	383,820	187,557	8,721,327	10,586,114	9,032,775	6,005,930	76,641,452
1909.....	11,604,584	356,707	191,533	12,300,184	10,780,126	9,117,143	6,592,356	84,064,232
1910.....	13,098,160	358,973	216,698	7,261,218	10,215,038	9,361,388	7,215,338	79,411,746
1911.....	12,535,851	376,777	240,586	8,621,431	11,123,251	9,092,472	7,954,223	87,774,198
1912.....	12,259,396	455,011	245,045	10,344,487	12,330,463	10,281,045	9,172,036	98,161,441
1913.....	12,605,882	502,988	283,188	13,468,505	13,766,180	13,211,801	10,882,804	112,059,337
1914.....	12,893,505	467,184	311,900	19,007,513	14,955,138	11,280,469	12,822,058	127,384,473
1915.....	15,736,743	554,729	358,558	19,343,532	13,876,060	11,451,673	15,961,191	135,523,207
1916.....	21,421,585	731,836	671,133	12,039,252	20,777,830	11,451,673	16,009,139	130,350,727
1917.....	35,802,567	496,387	2,814,546	8,633,096	27,124,004	11,469,148	16,300,579	148,599,343
1918.....	47,845,585	488,712	8,155,691	7,432,901	34,849,608	11,369,148	18,046,558	178,284,313
1919.....	77,431,432	1,305,676	18,252,440	6,295,650	45,494,584	11,327,236	19,273,758	232,731,283
1920.....	107,527,089	1,462,658	26,004,461	9,016,246	8,418,624	11,490,860	20,774,312	303,843,930
1921.....	139,551,520	1,102,088	37,420,751	10,846,875	8,886,458	11,490,860	22,696,561	361,118,145
1922.....	135,247,849	4,109,601	36,153,031	10,574,364	8,624,094	12,211,924	28,121,425	347,560,691

<sup>1</sup>Nine months.

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30, and from that date to 1922, on March 31.

## 8.—Principal Items of Dominion Expenditure, 1868-1922—concluded.

Expenditure chargeable to Capital.	Railway subsidies.	War and De-mobilization.	Other charges.	Total Disbursements.	Fiscal Years.
\$	\$	\$	\$	\$	
548,438	—	—	37,158	14,071,689	1868
440,419	—	—	429,663	14,908,166	1869
3,515,116	—	—	155,988	18,016,614	1870
3,670,396	—	—	—	19,293,478	1871
7,853,050	—	—	223,456	25,665,975	1872
19,859,441	—	—	5,719	39,039,808	1873
10,177,740	—	—	4,019	33,498,076	1874
6,922,743	—	—	2,253,097	32,888,911	1875
7,154,008	—	—	315,764	31,958,144	1876
7,599,710	—	—	1,388,984	32,507,996	1877
6,657,201	—	—	385,413	30,545,772	1878
5,648,332	—	—	676,225	30,779,939	1879
8,241,174	—	—	949,948	34,041,756	1880
8,176,317	—	—	117,772	33,796,643	1881
7,405,637	—	—	201,885	34,074,625	1882
14,147,360	—	—	21,369	42,898,886	1883
23,977,702	208,000	—	2,567,453	57,860,862	1884
13,220,186	403,245	—	502,587	49,163,078	1885
9,589,734	2,701,249	—	10,534,973	61,837,569	1886
4,439,939	1,406,533	—	—	41,504,152	1887
7,162,964	1,027,042	—	155,623	45,064,124	1888
4,420,313	846,722	—	1,333,328	43,518,198	1889
4,053,159	1,678,196	—	44,947	41,770,333	1890
3,115,860	1,265,706	—	68,074	40,793,208	1891
2,164,457	1,248,216	—	2,093,569	42,272,136	1892
3,088,318	811,394	—	139,963	40,853,728	1893
3,862,970	1,229,885	—	330,354	43,008,234	1894
3,030,490	1,310,549	—	399,294	42,872,338	1895
3,781,311	3,228,746	—	137,185	44,096,384	1896
3,523,160	416,955	—	682,881	42,972,756	1897
4,143,503	1,414,935	—	943,317	45,334,231	1898
5,936,343	3,201,220	—	501,572	51,542,635	1899
7,468,843	725,720	—	1,547,624	52,717,467	1900
7,695,488	2,512,329	—	908,681	57,982,866	1901
10,078,638	2,093,939	—	1,038,831	63,970,800	1902
7,052,725	1,463,222	—	1,538,722	61,746,572	1903
7,881,719	2,046,878	—	6,713,618	72,255,048	1904
11,933,492	1,275,630	—	2,275,334	78,804,139	1905
11,913,871	1,637,574	—	2,485,555	83,277,642	1906
11,329,144	1,324,889	—	1,581,945	65,778,139	1907
30,429,907	2,037,629	—	3,469,692	112,578,680	1908
42,593,167	1,785,887	—	4,998,238	133,441,524	1909
29,756,354	2,048,097	—	4,179,576	115,395,774	1910
30,852,963	1,284,892	—	2,949,197	122,861,250	1911
30,939,576	859,400	—	7,181,665	137,142,082	1912
27,206,046	4,935,507	—	255,787	144,456,878	1913
37,180,176	19,036,287	—	2,640,162	186,241,048	1914
41,447,320	5,191,507	60,750,476	5,186,016	248,098,526	1915
38,566,951	1,400,171	166,197,755	3,186,898	339,702,502	1916
26,880,031	959,584	306,488,815	15,275,345	498,203,118	1917
43,111,903	720,405	343,836,802	10,706,787	576,660,210	1918
25,031,266	43,805	446,519,440	7,283,582	697,042,212	1919
69,301,878	334,845	346,612,955	19,995,313	740,088,921	1920
40,012,807	—	16,997,544	492,048	418,620,544	1921
16,295,332	—	1,544,250	301,518	365,701,791	1922

## 9.—Principal Items of Receipts of Canada on Consolidated Fund Account, 1868-1922.

Fiscal years.	Customs taxes.	Excise taxes.	Other taxes.	Total ordinary taxes.	Interest on invest-ments.	Post office and money orders.	Public works. <sup>1</sup>	Total Receipts.
	\$	\$	\$	\$	\$	\$	\$	\$
1868.....	8,578,380	3,002,588	119,713	11,700,681	174,073	525,692	901,466	13,687,928
1869.....	8,272,880	2,710,028	129,665	11,112,573	824,424	535,315	918,933	14,379,175
1870.....	9,334,213	3,619,623	134,047	13,087,882	383,956	573,566	1,006,845	15,512,226
1871.....	11,841,105	4,295,945	183,319	16,320,369	554,384	612,631	1,146,240	19,335,561
1872.....	12,787,982	4,735,652	191,918	17,715,552	488,042	692,375	1,211,729	20,714,814
1873.....	12,954,164	4,460,682	201,709	17,616,555	396,404	833,657	1,316,636	20,813,469
1874.....	14,325,193	5,594,904	209,088	20,129,185	610,863	1,139,973	1,509,915	24,205,093
1875.....	15,351,012	5,069,687	244,180	20,664,879	840,887	1,155,332	1,432,360	24,648,715
1876.....	12,823,838	5,563,487	227,090	18,614,415	798,906	1,102,540	1,479,232	22,587,587
1877.....	12,546,988	4,941,898	209,039	17,697,925	717,684	1,114,946	1,917,455	22,059,274
1878.....	12,782,824	4,858,672	200,442	17,841,938	791,758	1,207,790	2,034,484	22,375,011
1879.....	12,900,659	5,590,763	185,191	18,476,613	592,500	1,172,418	1,863,149	22,517,382
1880.....	14,071,343	4,232,428	175,806	18,479,577	834,793	1,252,498	2,167,401	23,307,407
1881.....	18,406,092	5,343,022	193,025	23,942,139	751,513	1,352,110	2,759,591	29,635,298
1882.....	21,581,570	5,884,860	82,617	27,549,047	914,009	1,587,888	2,711,134	33,383,456
1883.....	23,009,582	6,260,117	-	29,269,699	1,001,193	1,800,391	3,101,138	35,794,650
1884.....	20,023,890	5,459,309	-	25,483,199	986,698	1,755,674	3,055,792	31,861,962
1885.....	18,935,428	6,449,101	-	25,384,529	1,997,035	1,841,372	3,065,503	32,707,001
1886.....	19,362,308	5,852,905	11,243	25,226,456	2,299,079	1,901,690	3,082,411	33,177,040
1887.....	22,373,951	6,308,201	4,850	28,687,002	990,887	2,020,624	3,270,782	35,754,993
1888.....	22,091,682	6,071,487	14,244	28,177,413	932,025	2,379,242	3,556,101	35,908,464
1889.....	23,699,413	6,886,739	27,371	30,613,523	1,305,392	2,220,504	3,642,557	38,782,870
1890.....	23,913,546	7,618,118	55,408	31,587,072	1,082,271	2,357,389	3,800,110	39,879,925
1891.....	23,305,218	6,914,850	94,083	30,314,151	1,077,228	2,515,823	3,685,530	38,579,311
1892.....	20,361,382	7,945,098	139,677	28,446,157	1,086,420	2,652,746	3,575,168	36,921,872
1893.....	20,910,662	8,367,364	43,341	29,321,367	1,150,167	2,773,508	3,761,474	38,168,609
1894.....	19,119,030	8,381,089	79,084	27,579,203	1,217,809	2,809,341	3,702,746	36,374,623
1895.....	17,585,741	7,805,733	54,725	25,446,199	1,336,047	2,792,790	3,591,689	33,978,129
1896.....	19,766,741	7,926,006	66,538	27,759,285	1,370,001	2,964,014	3,594,264	36,618,591
1897.....	19,386,278	9,170,379	91,969	28,648,626	1,443,004	3,202,938	3,587,166	37,829,778
1898.....	21,622,789	7,871,563	82,104	29,576,456	1,513,455	3,527,810	3,873,464	40,555,238
1899.....	25,150,745	9,641,227	166,097	34,958,069	1,590,448	3,193,778	4,433,934	46,741,249
1900.....	28,219,458	9,668,075	154,690	38,042,223	1,683,051	3,205,535	5,232,459	51,029,994
1901.....	28,293,930	10,318,266	131,354	38,743,550	1,784,334	3,441,505	5,770,071	52,514,701
1902.....	31,916,394	11,197,134	275,584	43,389,112	1,892,224	3,918,416	6,447,982	58,050,790
1903.....	36,738,033	12,013,779	263,694	49,015,506	2,020,953	4,397,833	7,088,502	66,037,069
1904.....	40,461,591	12,958,708	241,020	53,661,319	2,236,256	4,652,325	6,972,219	70,669,817
1905.....	41,437,569	12,586,475	-3,920	54,020,124	2,105,031	5,125,373	7,395,377	71,182,773
1906.....	46,053,377	14,010,220	11,221	60,074,818	2,140,312	5,933,343	8,310,267	80,139,360
1907.....	39,717,079	11,805,413	43,094	51,565,586	1,235,746	5,061,728	6,839,586	67,969,328
1908.....	57,200,276	15,782,152	343,535	73,325,963	1,925,569	7,107,887	9,973,523	96,054,506
1909.....	47,088,444	14,937,768	326,881	62,353,093	2,256,643	7,401,624	9,362,272	85,093,404
1910.....	59,767,681	15,253,353	388,453	75,409,487	2,807,465	7,958,548	10,114,990	101,503,711
1911.....	71,838,089	16,869,837	1,127,306	89,835,232	1,668,773	9,146,952	10,818,834	117,780,409
1912.....	85,051,872	19,261,662	1,534,270	105,847,804	1,281,317	10,492,394	11,651,947	136,108,217
1913.....	111,764,699	21,447,445	1,790,214	135,002,358	1,430,511	12,051,729	13,158,078	168,689,903
1914.....	104,691,238	21,452,037	1,334,792	127,478,067	1,964,541	12,954,530	14,197,053	163,174,395
1915.....	75,941,220	21,479,731	294,490	97,715,441	2,980,247	13,046,665	12,953,487	133,073,482
1916.....	98,649,409	22,428,492	-31,714	121,046,187	3,358,210	18,858,690	19,286,418	172,147,838
1917.....	134,043,842	24,412,348	-86,925	158,543,115	3,094,012	20,902,384	24,440,840	232,701,294
1918.....	144,172,630	27,168,445	208,966	171,550,041	4,466,724	21,345,394	27,971,098	260,778,953
1919.....	147,169,188	30,342,024	2,026,699	179,537,911	7,421,002	21,603,530	38,751,870	312,046,747
1920.....	168,796,823	42,698,083	132,133	211,627,039	17,086,981	24,471,709	921,015 <sup>2</sup>	349,746,335
1921.....	163,266,804	37,118,367	240,107	200,625,278	24,815,246	26,706,198	868,994 <sup>3</sup>	434,386,537 <sup>4</sup>
1922.....	105,686,645	36,755,207	394,932	142,836,784	21,961,513	26,402,299	408,096 <sup>3</sup>	381,952,387 <sup>4</sup>

NOTE.—Receipts from War Taxes 1915-22, are as follows:—1915, \$98,057; 1916, \$3,620,782; 1917, \$16,302,238; 1918, \$25,379,901; 1919, \$56,177,508; 1920, \$82,079,801; 1921, \$165,335,327; 1922, \$177,484,161.

<sup>1</sup>Including railways and canals. <sup>2</sup>Nine months. <sup>3</sup>Exclusive of railways.

<sup>4</sup>Exclusive of special receipts of \$1,905,648 in 1921 and \$310,184 in 1922.

## 10.—Population and Revenue and Expenditure per head, 1868-1922.

Year.	Population.	Revenue per head.	Expendi- ture per head.	Year.	Population.	Revenue per head.	Expendi- ture per head.
	No.	\$ cts.	\$ cts.		No.	\$ cts.	\$ cts.
1868.....	3,372,000	4.05	4.00	1894.....	4,894,000	7.29	7.54
1869.....	3,413,000	4.21	4.11	1895.....	5,034,000	6.75	7.58
1870.....	3,454,000	4.29	4.15	1896.....	5,086,000	7.20	7.26
1871*.....	3,485,761	5.55	4.48	1897.....	5,142,000	7.36	7.46
1871.....	3,518,000	5.50	4.44	1898.....	5,199,000	7.80	7.47
1872.....	3,611,000	5.74	4.87	1899.....	5,259,000	8.89	7.97
1873.....	3,668,000	5.67	5.23	1900.....	5,322,000	9.59	8.07
1874.....	3,825,000	6.33	6.10	1901*.....	5,371,315	9.78	8.72
1875.....	3,887,000	6.34	6.10	1901.....	5,403,000	9.72	8.67
1876.....	3,949,000	5.70	6.20	1902.....	5,532,000	10.49	9.18
1877.....	4,013,000	5.50	5.86	1903.....	5,673,000	11.64	9.11
1878.....	4,079,000	5.49	5.76	1904.....	5,825,000	12.13	9.55
1879.....	4,146,000	5.43	5.90	1905.....	5,992,000	11.88	10.57
1880.....	4,215,000	5.53	5.90	1906.....	6,171,000	12.99	10.90
1881*.....	4,324,810	6.85	5.90	1907.....	6,302,000	10.71	8.18
1881.....	4,337,000	6.83	5.88	1908.....	6,491,000	14.80	11.81
1882.....	4,384,000	7.62	6.18	1909.....	6,695,000	12.71	12.56
1883.....	4,433,000	8.08	6.48	1910.....	6,917,000	14.67	11.48
1884.....	4,455,000	7.11	6.94	1911*.....	7,206,643	16.34	12.18
1885.....	4,539,000	7.23	7.72	1912.....	7,365,205	18.48	13.33
1886.....	4,589,000	7.23	8.50	1913.....	7,527,208	22.41	14.89
1887.....	4,638,000	7.71	7.69	1914.....	7,692,832	21.21	16.56
1888.....	4,688,000	7.66	7.84	1915.....	7,862,078	16.93	17.24
1889.....	4,740,000	8.19	7.79	1916.....	8,035,584	21.42	16.22
1890.....	4,793,000	8.33	7.52	1917.....	8,180,160	28.45	18.17
1891*.....	4,833,239	7.98	7.52	1918.....	8,328,382	31.31	21.41
1891.....	4,844,000	7.96	7.50	1919.....	8,478,546	36.91	27.45
1892.....	4,889,000	7.55	7.52	1920.....	8,631,475	40.52	35.20
1895.....	4,936,000	7.73	7.46	1921*.....	8,788,483	49.43	41.09
				1922.....	8,966,834	42.60	38.76

NOTE.—The years marked with an asterisk (\*) are those of the Census, April 2, 1871, April 4, 1881, April 6, 1891, April 1, 1901, June 1, 1911 and 1921. In all other cases the population is estimated at the close of each fiscal year: June 30 from 1868 to 1906, March 31 from 1907 to 1910, and June 1 from 1911 to 1922. The fiscal period of 1907 is for the nine months ended March 31.

## 11.—Public Debt of Canada, March 31, 1916-1922.

Description.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$	\$	\$
Total debt.....	936,987,802	1,382,003,268	1,863,335,899	2,460,183,021	3,041,529,587	2,902,482,117	2,902,347,137
Total assets....	321,831,631	502,816,970	671,451,836	647,598,202 <sup>1</sup>	792,660,963 <sup>1</sup>	561,603,133 <sup>1</sup>	480,211,336 <sup>1</sup>
<b>Net debt..</b>	<b>615,156,171</b>	<b>879,186,298</b>	<b>1,191,884,063</b>	<b>1,812,584,819</b>	<b>2,248,868,624</b>	<b>2,340,878,984</b>	<b>2,422,135,801</b>
Interest on debt	21,451,585	35,802,567	47,845,585	77,531,432	107,527,089	139,551,520	135,247,849
Interest on investments....	3,358,210	3,094,012	4,466,724	7,421,002	17,086,981	24,815,246	21,961,513

<sup>1</sup>Active assets only.

## 12.—Assets of the Public Debt of Canada, March 31, 1919, 1920, 1921 and 1922.

Items.	1919.	1920.	1921.	1922.
Cash on hand and in banks.....	\$ 133,552,382	\$ 156,652,549	\$ 50,177,300	\$ 23,899,777
Special reserve.....	122,227,367	105,067,644	83,959,873	85,710,325
Advances to banks, provinces, etc., secured.....	106,796,711	157,124,864	138,705,097	103,591,694
Advances to Imperial and Foreign Governments.....	229,851,294	211,173,198	187,408,305	162,766,689
Advances to Soldiers' Settlement Board.....	1,408,554	41,735,530	69,366,217	78,293,234
Sinking Funds.....	18,664,676	22,338,941	1	1
Miscellaneous current accounts.....	35,097,218	98,568,237	31,986,341	25,949,617
<b>Total.....</b>	<b>647,598,202</b>	<b>792,660,963</b>	<b>561,603,133</b>	<b>480,211,336</b>

<sup>1</sup>Sinking funds are no longer included in the assets, as they are shown as deductions from the funded debt.





**14.—Funded Debt Payable in London, New York and Canada, together with Temporary Loans as at March 31, 1921—concluded.**

Description.	Amount.	Interest payable thereon.	Date of Maturity.
	\$	\$	
Dominion of Canada Savings Certificates.....	3,335,605	183,458	Various dates.
War Savings and Thrift Stamps.....	2,102,153	105,107	January 1, 1924.
Dominion of Canada War Loan, 1915-1925, 5 per cent.....	42,014,500	2,100,725	Dec. 1, 1925.
Dominion of Canada War Loan, 1916-1931, 5 per cent.....	52,931,600	2,646,580	Oct. 1, 1931.
Dominion of Canada War Loan, 1917-1937, 5 per cent.....	90,166,900	4,508,345	March 1, 1937.
Victory Loan 1917, 5½ per cent, due 1922	182,835,500	10,055,952	Dec. 1, 1922.
Victory Loan 1917, 5½ per cent, due 1927	63,437,250	3,489,048	Dec. 1, 1927.
Victory Loan 1917, 5½ per cent, due 1937	236,298,850	12,996,437	Dec. 1, 1937.
Victory Loan 1918, 5½ per cent, due 1923	172,392,900	9,481,609	Nov. 1, 1923.
Victory Loan 1918, 5½ per cent, due 1933	446,712,150	24,569,168	Nov. 1, 1933.
Victory Loan 1919, 5½ per cent, due 1924	107,934,300	5,936,391	Nov. 1, 1924.
Victory Loan 1919, 5½ per cent, due 1934	498,370,250	27,410,363	Nov. 1, 1934.
Bond Loan, 3½ per cent, 1925-1928.....	2,090,000	70,000	March 1, 1928.
Bond Loan, 4½ per cent, 1925-1945.....	65,207,351	2,934,330	Dec. 1, 1945.
<b>Gross Total</b> .....	<b>1,989,862,957</b>	<b>107,688,661</b>	
Less Sinking Funds.....	1,368,600	—	
<b>Net Total</b> .....	<b>1,988,494,357</b>	—	
Temporary Loans—			
New York Loans.....	15,015,000	—	
Other Temporary Loans.....	75,820,000	—	
<b>Total</b> .....	<b>90,835,000</b>	—	

**15.—Public Debt of Canada, July 1, 1867, to March 31, 1922.**

Fiscal Year.	Total debt.	Total assets.	Net debt.	Increase or decrease of debt.	Interest on debt.	Interest received from invested assets.
	\$	\$	\$	\$	\$	\$
1867.....	93,046,052	17,317,410	75,728,642	—	—	—
1868.....	96,896,666	21,139,531	75,757,135	28,493	4,501,568	126,420
1869.....	112,361,998	36,502,679	75,859,319	102,184	4,907,014	313,021
1870.....	115,993,706	37,783,964	78,209,742	2,350,423	5,047,054	383,956
1871.....	115,492,683	37,786,165	77,706,518	—503,225	5,165,304	554,384
1872.....	122,400,179	40,213,107	82,187,072	4,480,554	5,257,231	488,042
1873.....	129,743,432	29,894,970	99,848,462	17,661,390	5,209,206	396,404
1874.....	141,163,551	32,838,587	108,324,964	8,476,502	5,724,436	610,863
1875.....	151,663,402	35,655,024	116,008,378	7,683,414	6,590,790	840,887
1876.....	161,204,688	36,653,174	124,551,514	8,543,136	6,400,902	798,906
1877.....	174,675,835	41,440,526	133,235,309	8,683,795	6,797,227	717,684
1878.....	174,957,269	34,595,199	140,362,070	7,126,761	7,048,884	605,774
1879.....	179,483,871	36,493,684	142,990,187	2,628,117	7,194,734	592,500
1880.....	194,634,441	42,182,852	152,451,589	9,461,402	7,773,869	834,793
1881.....	199,861,537	44,465,757	155,395,780	2,944,191	7,594,145	751,513
1882.....	205,365,252	51,703,601	153,661,651	—1,734,129	7,740,804	914,009
1883.....	202,159,104	43,692,390	158,466,714	4,805,063	7,668,552	1,001,193
1884.....	242,482,416	60,320,566	182,161,850	23,695,136	7,700,181	986,698
1885.....	264,703,607	68,295,915	196,407,692	14,245,842	9,419,482	1,997,036
1886.....	273,164,341	50,005,234	223,159,107	26,751,415 <sup>1</sup>	10,137,009	2,299,079
1887.....	273,187,626	45,872,851	227,314,775	4,155,668	9,682,929	990,887
1888.....	284,513,842	49,982,484	234,531,358	7,216,583	9,823,313	932,025
1889.....	237,722,063	50,192,021	237,530,042	2,998,684	10,148,932	1,305,392
1890.....	286,112,295	48,579,083	237,533,212	3,170	9,656,841	1,082,271

<sup>1</sup>This amount includes \$10,199,520.33, for which land was taken from the Canadian Pacific Ry. Co.

## 15.—Public Debt of Canada July 1, 1867, to March 31, 1922—continued.

Fiscal Year.	Total debt.	Total assets.	Net debt.	Increase or decrease of debt.	Interest on debt.	Interest received from invested assets.
	\$	\$	\$	\$	\$	\$
1861.....	289,899,230	52,090,199	237,809,031	275,819	9,584,137	1,077,228
1862.....	295,333,274	54,201,840	241,131,434	3,322,403	9,763,978	1,086,420
1863.....	300,054,525	58,373,485	241,681,040	549,606	9,806,888	1,150,167
1864.....	308,343,023	62,164,994	246,183,029	4,501,989	10,212,596	1,217,809
1865.....	318,048,755	64,973,828	253,074,927	6,891,898	10,466,294	1,336,047
1866.....	325,717,537	67,220,104	258,497,433	5,422,506	10,502,430	1,370,001
1867.....	332,530,131	70,991,535	261,538,596	3,041,163	10,645,663	1,443,004
1868.....	338,375,984	74,419,585	263,956,399	2,417,803	10,516,758	1,513,655
1869.....	345,160,903	78,887,456	266,273,447	2,317,048	10,855,112	1,590,448
1870.....	346,206,980	80,713,173	265,493,807	-779,640	10,699,645	1,683,051
1901.....	354,732,433	86,252,429	268,480,004	2,986,197	10,807,955	1,784,834
1902.....	366,358,477	94,529,357	271,829,090	3,349,086	10,975,935	1,822,224
1903.....	361,344,098	99,737,109	261,606,989	-10,222,101 <sup>1</sup>	11,068,139	2,020,953
1904.....	364,962,512	104,094,793	260,867,719	-739,270 <sup>2</sup>	11,128,637	2,236,256
1905.....	377,678,580	111,454,413	266,224,167	5,356,448	10,630,115	2,105,031
1906.....	392,269,680	125,226,703	267,042,977	818,810	10,814,697	2,140,312
1907 (9 mos.).....	379,960,826	116,294,966	263,671,860	-3,371,117	6,712,771	1,235,746
1908.....	408,207,158	130,246,298	277,960,860	14,280,000	10,973,597	1,925,569
1909.....	478,553,427	134,605,148	323,930,279	45,969,419	11,604,584	2,256,648
1910.....	470,663,466	134,394,500	336,268,546	12,338,267	13,098,161	2,807,465
1911.....	474,941,487	134,899,435	340,042,052	3,773,506	12,535,851	1,368,773
1912.....	508,338,592	168,419,131	339,919,461	-122,591	12,259,397	1,281,317
1913.....	488,232,555	168,930,930	314,301,625	-25,617,836	12,605,882	1,430,511
1914.....	544,391,369	208,394,519	335,996,850	21,695,224	12,893,505	1,964,541
1915.....	700,473,814	221,097,731	449,376,083	113,379,233	15,736,743	2,980,247
1916.....	936,987,802	321,831,631	615,156,171	165,780,088	21,421,585	3,358,210
1917.....	1,382,003,268	502,816,970	879,186,298	261,030,127	35,802,567	3,094,012
1918.....	1,963,535,800	671,451,836	1,191,884,063	312,697,765	47,845,585	4,466,724
1919.....	2,460,183,021	647,538,202 <sup>3</sup>	1,812,584,819	620,700,756	77,531,432	7,421,002
1920.....	3,041,529,887	792,660,963 <sup>4</sup>	2,248,868,624	436,283,805	107,527,089	17,086,981
1921.....	2,902,482,117	561,603,133	2,340,878,984	92,010,360	139,551,520	24,815,246
1922.....	2,902,847,137	480,211,336 <sup>5</sup>	2,422,135,801	81,256,817	135,247,849	21,961,513

NOTE.—The minus sign (—) denotes a decrease.

<sup>1</sup>This amount includes \$3,305,450.24, caused by the settlement of accounts with Ontario and Quebec.<sup>2</sup>This amount takes into account \$5,397,503.13 allowed to Ontario and Quebec, under 47 V., c. 6.<sup>3</sup>Active assets only.

**Provincial Subsidies.**—Tables 16 and 17 show the amounts of the subsidies and other payments made by the Dominion to the Provincial Governments for each of the years 1916 to 1921 (Table 16), and the totals paid from Confederation to date (Table 17). The Provincial subsidies payable by the Dominion Government were originally settled by the British North America Act, 1867 (30 and 31 Vict., c. 3, s. 118), but were revised by the British North America Act, 1907 (7 Edw. VII, c. 11). Under the revised settlement each Provincial Government receives (a) a fixed grant according to population and (b) a grant at the rate of 80 cents per head of the population up to 2,500,000, and at the rate of 60 cents per head of so much of the population as exceeds that number. The Province of British Columbia received an additional grant of \$100,000 per annum for a period of 10 years from 1907.<sup>1</sup> An additional grant of \$100,000 per annum is payable to Prince Edward Island under an Act of 1912 (2 Geo. V., c. 42), and the payments to Manitoba were revised by the Extension of Boundaries (Manitoba) Act (2 Geo. V, c. 32).

<sup>1</sup> See Canada Year Book 1907, pp. xxxiii-iv.

Other payments to the Provincial Governments by the Dominion Government consist of special grants, as compensation for lands and allowances for buildings, allowances in lieu of debt, etc.

**16.—Subsidies and other Payments of Dominion to Provincial Governments, 1916-1921.**

Provinces.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	381,932	381,932	381,932	381,932	381,932	381,932
Nova Scotia.....	636,667	636,667	636,667	636,667	636,667	636,667
New Brunswick.....	637,976	637,976	637,976	637,976	637,976	637,976
Quebec.....	1,969,630	1,969,630	1,969,630	1,969,630	1,969,630	1,969,630
Ontario.....	2,396,379	2,396,379	2,396,379	2,396,379	2,396,379	2,396,379
Manitoba.....	1,406,204	1,423,679	1,423,679	1,447,335	1,470,991	1,470,991
Saskatchewan.....	1,710,675	1,710,675	1,710,675	1,680,077	1,753,075	1,753,075
Alberta.....	1,589,075	1,589,075	1,589,075	1,534,105	1,621,075	1,621,075
British Columbia.....	723,135	723,135	623,135	623,135	623,135	623,135
<b>Total.....</b>	<b>11,451,673</b>	<b>11,469,148</b>	<b>11,369,148</b>	<b>11,327,236</b>	<b>11,490,860</b>	<b>11,490,860</b>

**17.—Total of Subsidy Allowances from July 1, 1867, to March 31, 1921.**

Provinces.	Allowance for Government.	Allowance per head of Population.	Special Grants. <sup>1</sup>	Interest on Debt Allowance. <sup>2</sup>	Total.
	\$	\$	\$	\$	\$
Prince Edward Island.....	2,420,000	4,091,031	2,637,866	2,059,791	11,208,688
Nova Scotia.....	5,069,000	17,890,433	826,980	2,494,593	26,274,056
New Brunswick.....	4,520,000	13,693,342	7,830,000	1,053,591	27,098,933
Quebec.....	6,160,000	56,868,282	—	3,539,803	66,568,085
Ontario.....	6,560,000	71,799,986	—	3,034,716	81,394,702
Manitoba.....	4,265,090	9,936,359	9,146,633	8,390,005	31,737,997
Saskatchewan.....	2,711,667	6,510,224	8,343,750	6,486,090	24,081,641
Alberta.....	2,686,666	5,210,757	7,775,000	6,486,000	22,258,423
British Columbia.....	3,660,000	6,314,480	6,900,000	1,467,337	17,441,817
<b>Total.....</b>	<b>38,043,333</b>	<b>192,346,944</b>	<b>42,660,229</b>	<b>35,013,836</b>	<b>308,064,342</b>

<sup>1</sup> Compensation for lands and allowances for buildings.

<sup>2</sup> Allowance in lieu of debt.

**Inland Revenue.**

Under the Inland Revenue Act (R.S. 1906, c. 5), the Department of Inland Revenue until 1918 had the control and management of the collection of excise duties, of stamp duties, internal taxes, standard weights and measures and of the collection of bridge and ferry tolls and rents. It administered the statutes which deal with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha and the analysis of fertilizers and feeding stuffs. The Department also established the food standards, which were put into force from time to time by Orders in Council under the authority of Section 26 of the Adulteration Act. For the year ended March 31, 1921, the total inland revenue of the Dominion amounted to \$116,916,991, as compared with \$58,928,536 in 1920. By Order in Council, dated May 18, 1918, the Department of Customs and the Department of Inland Revenue were amalgamated and combined under the name of the Department of Customs and Inland Revenue under one Minister of the Crown. By Order in



Council dated June 3, 1918, the administration of the Gas, Electric Light and Weights and Measures Inspection Acts, the Adulteration of Food, Commercial Feeding Stuffs, Fertilizers, Proprietary and Patent Medicine and Inspection of Water Meters Acts was transferred to the Department of Trade and Commerce as from September 1, 1918. On June 4, 1921, the Departments of Customs and Inland Revenue were amalgamated, under one Minister, as the Department of Customs and Excise (11-12 George V, chap. 26).

**Canadian Excise Tariff.**—The following is a statement of the Canadian excise tariff, as existing on July 1, 1922:—

<b>Spirits—</b>		<b>Tobacco, per lb.</b>	<b>\$0.20</b>
When made from raw grain, per proof gal.	\$9.00	Cigarettes, weighing not more than 3 lb. per M, per thousand	7.50
When made from malted barley	9.02	Cigarettes, weighing more than 3 lb. per M, per thousand	12.50
When made from imported molasses or other sweetened matter free of Customs duty, per proof gal.	9.03	Foreign raw leaf tobacco, unstemmed, per standard lb.	0.40
Malt, per lb.	0.03	Foreign raw leaf tobacco, stemmed, per standard lb.	0.60
Malt, imported, crushed or ground, per lb.	0.05	Canada twist tobacco, per lb.	0.20
Malt liquor, when made in whole or part from any other substance than malt, per gal.	0.15	Snuff, per lb.	0.20
		Cigars, per M.	3.00
		Cigars, when put up in packages of less than 10 each, per M.	4.00

When, however, any person is licensed by the Minister of Customs and Inland Revenue to manufacture patent and proprietary medicines, extracts, essences and pharmaceutical preparations by the use of spirits in bond, subject to the Inland Revenue Act and regulations thereunder, the following duties of excise shall be collected: when made from raw grain, \$2.40 per proof gallon; when made from malted barley, per proof gallon \$2.42; when made from imported molasses or other sweetened matter free of customs duty, per proof gallon \$2.43. Druggists licensed by the Minister of Customs and Inland Revenue to prepare prescriptions for medicines and pharmaceutical preparations, are also allowed to use limited quantities of spirits testing not less than 50 p.c. over proof on payment of the above lower manufacturer's rates of duty. A drawback of 99 p.c. of the duty may be granted when spirits testing not less than 50 p.c. over proof are delivered in limited quantities to universities, scientific or research laboratories or hospitals for medicinal purposes only.

**Consumption of Alcohol and Tobacco.**—The separate sources of inland revenue for the years 1916 to 1921 are set out in Table 18. The two largest sources of inland revenue used to be spirits and tobacco, which together accounted for over 80 p.c. of the total in 1913 and about 65 p.c. of the total in 1920; however, owing to the increased yield in the war taxes, spirits and tobacco produced only about 28 p.c. of the 1921 inland revenue. Tables 18 and 19 in the edition of 1916-17 showed that the consumption of alcoholic liquors and of tobacco tended annually to increase, both absolutely and relatively per head of the population up to the year 1913. For the year 1912-13 the consumption of spirits reached its highest point, viz., 1.112 gallon per head. For the year 1913-14 the consumption of malt liquor rose to its highest point, viz., 56,060,846 gallons, or

7.2 gallons per head (Table 21). Under the influence of the war and resulting restrictive legislation a marked decrease in the consumption of liquor and tobacco became apparent, the consumption of spirits falling to 0.391 gallons per head in the fiscal year ended March 31, 1919, of wine to 0.025 gallons, of beer to 2.948 gallons, of tobacco to 3.109 lbs. The general prosperity evident in the following year led to a considerable increase in consumption of liquors and tobacco, followed by a decline in the consumption of wine, beer and tobacco in 1921, due in some measure to the industrial depression. For the same reason the consumption of cigars fell from 270,089,761 to 214,262,197, a decline of more than 20 p.c. (See Table 20 for further details).

### 18.—Excise and other Inland Revenues for the Fiscal Years 1916-1921.

Sources of Revenue.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$
Acetic acid.....	8,250	8,049	7,330	6,795	6,007	1,955
Cigars.....	635,158	730,215	776,086	1,261,915	1,629,254	1,293,655
Electric light.....	70,562	71,116	79,520	1	1	1
Malt.....	2,680,300	2,367,902	1,791,482	1,477,702	2,101,939	2,418,476
Malt liquor.....	97,779	109,215	80,486	19,082	76,502	84,301
Manufactures in bond.....	105,812	110,409	128,183	118,856	124,171	76,598
Methylated spirits.....	111,846	183,708	398,968	322,583	508,406	405,457
Ferry licenses.....	989	989	2,013	—	—	—
Seizures.....	10,349	8,353	6,933	42,021	213,167	174,523
Spirits.....	8,701,075	9,880,567	11,486,527	6,964,115	8,950,241	5,757,463
Tobacco.....	10,222,784	11,197,103	12,616,879	20,248,335	29,455,255	27,132,933
War tax, revenue stamps, etc.	1,550,488	2,072,441	2,253,422	11,964,740	15,744,010	79,346,815
Weights and measures, gas and law stamps.....	169,454	194,417	204,955	8,628 <sup>2</sup>	7,490 <sup>2</sup>	9,423 <sup>2</sup>
Other revenues.....	78,389	123,433	134,582	70,827	112,064	163,482
<b>Totals.....</b>	<b>24,452,235</b>	<b>27,057,917</b>	<b>29,962,366</b>	<b>42,505,989</b>	<b>58,928,536</b>	<b>116,916,991</b>

<sup>1</sup> Administration now under Department of Trade and Commerce.

<sup>2</sup> Law Stamps only.

### 19.—Statistics of Distillation for the Fiscal Years 1917-1921.

Schedule.	1917.	1918.	1919.	1920.	1921.
Licenses issued.....No.	18	19	18	14	14
Licence fees.....\$	4,375	4,625	4,375	3,500	3,250
Grain, etc., for distillation—					
Malt.....lb.	7,909,353	5,292,991	996,093	524,832	1,671,298
Indian corn.....	69,447,487	35,633,568	15,310,212	7,044,316	18,111,700
Rye....."	10,430,817	7,027,450	1,775,935	1,170,162	4,254,150
Oats....."	131,580	124,460	41,900	28,700	133,980
Wheat....."	27,732	—	1,237,140	482,596	69,740
Total grain distillation....."	88,007,019	43,078,469	19,361,280	9,250,606	24,240,868
Molasses....."	27,416,716	18,171,440	58,598,950	34,072,251	54,848,675
Proof spirits manufactured.....gal.	6,400,119	3,566,955	4,187,109	2,356,329	4,194,691
Duty collected ex-manufactory on deficiencies and assessments—					
Gallons.....	3,080	2,413	1,860	388	3,551
Amount.....\$	7,404	5,791	4,464	931	8,536
Total duty collected plus license fees.....\$	11,779	10,416	8,539	4,431	11,786
Vinegar.....gal.	2,737,921	2,969,501	2,922,886	2,693,779	880,982 <sup>1</sup>
Acetic Acid....."	193,735	150,749	167,353	147,669	46,375

<sup>1</sup>For April, May and June only. Regulations changed July 20, and duty taken off from that date.

**20.—Quantities of Spirits, Malt Liquor, Malt and Tobacco taken out of Bond for Consumption in the Fiscal Years 1916-1921.**

Items.	1916.	1917.	1918.	1919.	1920.	1921.
Spirits.....gal.	3,629,324	4,118,147	4,591,972	2,941,108	3,816,124	2,816,071
Malt liquor.....“	39,638,877	34,827,284	28,442,427	26,024,117	36,863,867	25,509,757
Malt.....lb.	89,476,590	78,815,746	59,623,049	49,184,747	69,975,631	82,210,351
Tobacco, snuff and cigar-ettes.....“	23,937,785	24,656,910	26,774,298	24,640,853	30,371,961	26,708,764
Cigars.....No.	207,647,808	239,752,252	254,445,945	221,087,110	270,089,761	214,262,197

**21.—Consumption per head of Spirits, Wine, Beer and Tobacco, and amount of Excise and Customs Duties per head, in the Fiscal Years 1914-1921.**

(From the Report of the Department of Customs and Inland Revenue).

Items.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Consumption of—								
Spirits.....gal.	1.061	0.872	0.745	0.698	0.699	0.391	0.624	0.857
Wine.....“	0.124	0.095	0.062	0.061	0.061	0.025	0.078	0.077
Beer.....“	7.200	6.071	4.950	4.188	3.414	2.948	4.100	3.954
Tobacco.....lb.	3.711	3.427	3.329	3.330	3.612	3.109	3.745	3.272
Duty paid on—								
Spirits.....\$	2.249	2.086	1.951	1.788	1.810	0.942	1.536	2.256
Wine.....\$	0.069	0.051	0.033	0.033	0.036	0.015	0.056	0.074
Beer.....\$	0.328	0.379	0.362	0.304	0.228	0.170	0.243	0.292
Tobacco.....\$	1.438	1.361	1.454	1.520	1.698	2.520	3.541	3.245

**22.—Number of Excise Licenses issued during the Fiscal Years 1913-1921.**

Description.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Distillers.....	14	14	14	13	15	12	14	12	12
Maltsters.....	40	37	36	19	109	98	81	75	73
Brewers.....	117	119	118	106	84	71	72	87	85
Tobacco manufacturers.....	72	82	89	84	82	71	72	87	85
“ Can. twist.....	31	24	25	19	220	195	165	155	147
Cigar manufacturers.....	253	225	262	221	220	12	11	13	12
Petroleum refineries.....	5	5	6	9	10	12	11	13	12
Manufacturers in Bond—									
Vinegar.....	19	20	20	18	19	21	19	19	18
Perfumes, pharmaceutical preparations, etc.....	29	37	47	54	37	38	32	88	114
Fulminate of mercury.....	1	2	2	2	—	—	—	—	—
Cereal foods.....	1	1	1	3	—	—	—	—	—
Chemical stills.....	70	70	69	119	116	123	122	129	140
Wood alcohol manufacturers.....	11	11	11	12	11	12	12	12	12
Malt vinegar brewers.....	2	2	1	2	2	2	2	3	3
Malt products.....	—	—	—	—	—	—	—	1	1
Compounders.....	6	6	5	2	—	—	—	—	—
Still manufacturers.....	2	2	3	3	3	3	3	6	4
Acetic acid manufacturers.....	1	1	2	2	2	3	2	2	2
Bonded warehouses.....	262	252	265	230	228	180	135	85	49
Explosives.....	—	—	—	—	4	5	5	2	—
Rectifiers.....	—	—	—	—	2	2	5	3	—
Sundries.....	—	—	—	—	17	23	50	90	119

## PROVINCIAL PUBLIC FINANCE.

Provincial Governments in Canada are in the position of having, under section 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), a considerable assured income paid to them in subsidies from the Dominion Treasury. Details of these payments are given for recent years in Tables 16 and 17 of this section. In addition, through their retention of ownership of their lands, minerals and other natural resources, the provinces which by the voluntary action of their previously existing governments entered Confederation, raise considerable revenues through land sales, sales of timber, mining royalties, leases of water-powers, etc., while the prairie provinces receive from the Dominion special grants in lieu of land revenues.

Further, under section 92 of the British North America Act, 1867, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province. While the *laissez faire* school of political thought was predominant throughout the country, provincial receipts and expenditures were generally very moderate, as may be seen both for individual provinces and for the provinces collectively, from Table 23. From the commencement of the twentieth century, however, the Canadian public, more especially in Ontario and the West, began to demand increased services from the government, particularly along the lines of education, sanitation, public ownership and operation of public utilities. The performance of these functions necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed have been the taxation of corporations and succession duties, the latter showing a considerably increased yield even within the comparatively short period of five years from 1916 to 1920 covered by the comparative statement compiled by the Finance Branch of the Dominion Bureau of Statistics,<sup>1</sup> and published as Table 25. Prominent among the objects of increased expenditure in this same period are education, public buildings, public works and enterprises and charities, hospitals and corrections. The fact that provincial government is cheaper per head in the *laissez faire* eastern provinces is evident from Table 24, which gives the total and per capita ordinary revenue and expenditure for each of the three provincial fiscal years ended in 1920. This, however, is not to be taken as evidence that the larger services rendered to the public in the western provinces are not worth what is being paid for them.

For the half century subsequent to Confederation the provincial accounts, published by each Government according to its own system of accounting, were quite incomparable as between the provinces, a fact much regretted by students of provincial public finance. Upon the creation of the Dominion Bureau of Statistics in 1918, its Finance Branch undertook the work of placing the varying provincial public

<sup>1</sup>The succession duties collected by the provinces in 1920 amounted in the aggregate to \$7,335,728, as compared with \$1,020,972 as recently as 1904, or a seven-fold increase in 16 years. The aggregate revenue raised by taxation of corporations, etc., increased from \$7,217,548 in 1916 to \$19,207,699 in 1920.



accounts on a comparable basis. As the result of an exhaustive detailed analysis of the provincial public accounts, a summary statement of the ordinary receipts and expenditure of the Provincial Governments appeared in the 1919 Year Book for the first time on a comparable basis. In the present issue is published an analysis of the provincial public accounts for the five fiscal years from 1916 to 1920. All doubtful points have been cleared up by correspondence between the Bureau and the provincial authorities concerned. The various items of receipts and expenditures have been classified under appropriate headings, and a uniform terminology has been adopted. The result is given in Tables 25 and 26, which present for each of the five provincial fiscal years from 1916 to 1920 summary statements of the ordinary receipts and expenditures of all the Provincial Governments, as classified under principal headings. From these statements it is possible to ascertain the amounts received and expended in each year under the respective headings for each province, while Table 27 supplies the same information for the provinces collectively.

In the use of these tables it should be borne in mind that the fiscal years in the different provinces do not coincide. In Prince Edward Island, Manitoba and Alberta the fiscal year ends December 31, in Nova Scotia, September 30, in New Brunswick and Ontario, October 31, in Quebec, June 30, in Saskatchewan, April 30, and in British Columbia March 31.

The total ordinary revenue of the nine provinces for the latest fiscal year available, 1920, was \$92,653,023 as compared with \$76,844,307 in 1919, \$69,345,305 in 1918, \$57,989,984 in 1917 and \$50,015,795 in 1916. The total ordinary expenditure in 1920 was \$88,250,675 as against \$76,403,973 in 1919, \$66,052,909 in 1918, \$60,122,485 in 1917 and \$53,826,219 in 1916. Thus the total ordinary revenue of the provinces shows an increase of 85.2 p.c. in the short space of four years, while the total ordinary expenditure shows an increase of 63.9 p.c. The main cause of the increasing expenditure has been, of course, the rapid rise during the period in the prices of the commodities and labour required for the public service, while the extension of the functions of government has also been a considerable factor.

Considering the individual provinces, the largest revenue for 1920 is that of Ontario, \$25,981,517, Quebec being next with \$14,472,651 and British Columbia third with \$13,866,603. As regards total expenditure for the same year, that of Ontario was highest, \$25,880,843, Quebec being second with \$13,520,740 and British Columbia third with \$11,568,003. In 1920 British Columbia raised the largest revenue per head of population, \$27.14, while Quebec had the lowest, \$6.23.

**Provincial Assets and Liabilities.**—The asset and liability statements of the provinces vary so greatly in their content that heretofore no attempt has been made to publish any collective statement. In some instances natural resources, such as timber, mining, agricultural and school lands unsold, are shown as assets, while in others no account is taken of these. In some cases provincial government buildings with lands connected therewith, also roads,

bridges and public improvements are considered as assets, while other provinces do not include them in their published statements. With a view to presenting the principal items which make up provincial assets and liabilities, the following co-ordinated table (Table 28) has been compiled, in consultation with the various provincial audit departments. Other miscellaneous assets of the provinces are briefly enumerated. Indirect liabilities, which are separately given, consist mainly, as shown by the foot-notes, of guarantees of bonds and debentures. Generally speaking, both the assets and the liabilities of the provinces in which public ownership of public utilities exists, are proportionately larger than is the case in the other provinces.

23.—Statement showing the Ordinary Revenues and Expenditures of the Provincial Governments, for their respective fiscal years 1869-1920.

Year.	Prince Edward Island.		Nova Scotia.		New Brunswick.		Quebec.	
	Receipts.	Expenditure. <sup>2</sup>	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
1869-72 (total 4 yr.)	\$ 1,372,064	\$ 1,569,447	\$ 2,380,891	\$ 2,295,304	\$ 1,939,397	\$ 1,978,949	\$ 6,638,866	\$ 6,072,289
1873	434,979 <sup>1</sup>	401,602 <sup>1</sup>	600,196	608,919	568,550	540,486	1,795,749	1,707,356
1874	403,013	442,767	686,826	676,111	591,465	589,794	1,983,603	1,908,283
1875	306,597	395,277	616,350	714,803	608,099	679,814	2,036,869	2,080,779
1876	324,144	353,226	589,637	653,874	634,850	587,330	2,329,868	2,283,025
1877	326,274	331,632	562,800	588,942	618,113	650,233	2,397,383	2,471,553
1878	312,684	334,133	645,294	688,003	584,977	640,815	2,018,482	2,577,171
1879	288,062	313,845	394,205	503,051	526,685	616,132	2,201,215	2,715,549
1880	269,603	257,309	541,318	506,263	675,285	609,671	2,432,820	3,008,023
1881	275,380	261,276	476,445	494,582	607,445	598,844	3,191,779	3,566,612
1882	233,465	257,228	537,667	569,119	643,710	614,236	3,419,371	3,628,229
1883	228,169	270,477	563,864	541,099	822,889 <sup>3</sup>	943,824 <sup>3</sup>	2,759,707	3,096,943
1884	280,271	279,545	586,561	572,768	650,466 <sup>4</sup>	633,658	2,823,565	3,124,620
1885	248,222	266,318	613,026	620,700	617,570	584,473	2,926,148	2,936,734
1886	233,978	304,467	633,145	656,348	634,574	623,593	2,949,562	3,032,607
1887	241,736	288,052	656,639	664,103	665,819	667,647	2,965,567	3,288,798
1888	254,209	279,939	712,951	668,400	664,800	640,806	2,738,768	3,365,032
1889	234,635	263,605	668,774	713,941	651,031	637,051	3,628,544	3,543,619
1890	224,882	305,799	664,938	710,497	646,079	651,735	3,537,407	3,894,413
1891	274,047	304,486	661,541	692,538	612,762	680,813	3,457,144	4,095,520
1892	245,652	259,012	769,976	822,462	652,669	676,483	3,458,404	4,446,640
1893	217,473	294,201	682,567 <sup>5</sup>	642,385 <sup>5</sup>	730,877	711,673	3,373,363	3,907,445
1894	282,468	280,596	888,213	862,842	619,298 <sup>6</sup>	661,521 <sup>6</sup>	4,258,728	4,267,946
1895	277,314	310,177	895,455	831,230	687,437	684,635	4,221,687	4,189,985
1896	273,496	287,631	841,160	853,893	698,437	701,452	4,327,910	4,099,707
1897	272,550	310,752	832,240	853,699	745,203	727,187	3,877,466	4,892,282
1898	276,183	301,700	855,960	849,330	708,809	727,500	4,176,140	4,415,370
1899	282,678	276,789	876,828	852,379	764,439	749,644	4,223,579	4,201,023
1900	282,056	308,494	1,014,123	937,261	758,989	794,477	4,451,578	4,433,386
1901	309,445	315,326	1,090,230	1,088,927	1,031,267	1,100,346	4,563,432	4,516,554
1902	324,670	324,185	1,140,217	1,087,403	826,066	845,637	4,515,170	4,490,677
1903	318,766	327,662	1,243,581	1,177,331	801,410	816,295	4,699,773	4,596,061
1904	307,720	266,120	1,194,756	1,161,456	396,552	385,457	4,886,681	4,755,400
1905	313,445	324,734	1,221,561	1,307,708	865,667	871,426	5,069,601	4,889,366
1906	258,235 <sup>7</sup>	264,135 <sup>7</sup>	1,391,629	1,375,588	882,202	879,066	5,340,167	5,179,817
1907	350,479	346,081	1,438,167	1,539,169	969,939	960,093	5,270,595	4,780,919
1908	366,601	377,603	1,783,467	1,624,760	1,086,738	1,042,196	6,016,616	5,539,880
1909	375,374	366,938	1,632,979	1,653,508	1,259,827	1,255,382	6,082,137	5,627,755
1910	375,151	382,891	1,592,363	1,725,914	1,324,440	1,317,876	6,571,944	5,627,755
1911	374,798	398,490	1,625,653	1,790,778	1,347,077	1,403,547	7,032,745	6,424,900
1912	485,562 <sup>8</sup>	527,228 <sup>8</sup>	1,870,056	1,892,075	1,417,732	1,499,049	8,670,103	7,350,680
1913	506,555	450,112	1,920,565	1,949,784	1,459,000	1,446,963	8,382,377	7,953,985
1914	525,555	445,396	1,885,458	2,098,893	1,505,229	1,493,774	9,000,377	8,624,368
1915	470,730	510,345	1,953,302	2,073,672	1,634,079	1,626,634	9,597,926	8,710,516
1916	508,455	453,151	2,165,328	2,152,773	1,580,419	1,568,340	9,647,984	9,436,687
1917	496,053	487,113	2,118,620	2,344,009	1,572,814	2,166,904	10,441,114	9,907,672
1918	514,475	484,416	2,332,634	2,573,797	2,357,909	2,399,062	13,806,392	11,671,830
1919	501,915	655,409	3,280,313	3,280,282	2,182,420	2,595,937	12,666,352	12,371,131
1920	740,973	660,774	3,916,848	3,100,892	2,969,323	14,472,651	13,520,740	

<sup>1</sup>11 months only. <sup>2</sup>Includes expenditure on capital account, except for 1900-1904. <sup>3</sup>14 months. <sup>4</sup>Contains

\$250,000, proceeds of bonds for funding floating debt. <sup>5</sup>For 5 months ended September 30. <sup>6</sup>10 months.

<sup>7</sup>Nine months only, owing to change of fiscal year. <sup>8</sup>Fifteen months, owing to change of fiscal year.

23.—Statement showing the Ordinary Revenues and Expenditures of the Provincial Governments, for their respective fiscal years 1869-1920—con.

Year.	Ontario.		Manitoba.		Saskatchewan.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
1869-72 (total 4 yrs.)	\$ 11,532,880	\$ 8,277,724	\$ —	\$ —	\$ —	\$ —
1873.	3,141,298	3,099,634	—	138,658	—	—
1874.	3,446,348	3,883,702	24,611 <sup>7</sup>	61,177 <sup>7</sup>	—	—
1875.	3,156,606	3,617,522	74,534	133,390	—	—
1876.	2,589,085	3,152,365	150,010 <sup>8</sup>	145,248 <sup>8</sup>	—	—
1877.	2,502,449	3,131,998	99,608	92,958	—	—
1878.	2,284,656	2,914,864	98,864	107,926	—	—
1879.	2,287,951	2,954,712	135,311	151,086	—	—
1880.	2,584,152	2,531,166	118,867	185,109	—	—
1881.	2,788,747	2,592,800	121,867	226,808	—	—
1882.	2,880,450	2,931,825	255,208	232,189	—	—
1883.	2,439,941	2,900,035	376,863	386,071	—	—
1884.	2,820,555	3,207,890	302,962	501,710	—	—
1885.	3,005,921	3,040,139	150,728 <sup>7</sup>	229,278 <sup>7</sup>	—	—
1886.	3,148,660	2,181,450	485,326	484,002	—	—
1887.	3,527,578	3,454,372	506,890	520,190	—	—
1888.	3,602,862	3,544,835	841,894 <sup>8</sup>	758,130 <sup>8</sup>	—	—
1889.	4,464,031	4,578,982	583,795	588,467	—	—
1890.	3,434,259	3,907,428	585,709	708,302	—	—
1891.	4,138,589	4,158,460	590,484	664,432	—	—
1892.	4,662,922	4,068,257	605,288	832,890	—	—
1893.	4,091,914	3,907,145	633,116	798,188	—	—
1894.	3,453,163	3,839,339	613,094	699,319	—	—
1895.	3,585,300	3,758,595	703,172	704,946	—	—
1896.	3,490,671	3,703,380	665,353	763,158	—	—
1897.	4,139,848	3,767,676	683,706	780,109	—	—
1898.	3,710,928	3,864,971	936,604	837,888	—	—
1899.	4,103,478	3,717,404	776,234	972,462	—	—
1900.	4,192,940	4,003,729	905,331	1,085,405	—	—
1901.	4,466,044	4,038,834	1,008,653	988,251	—	—
1902.	4,291,083	4,345,004	1,443,256	1,248,128	—	—
1903.	5,466,653	4,888,983	1,352,218	1,262,292	—	—
1904.	6,128,358	5,267,453	1,486,667	1,271,733	—	—
1905.	6,016,176	5,396,017	1,860,900	1,398,431	618,432 <sup>1</sup>	118,692 <sup>1</sup>
1906.	7,149,478	6,720,179	2,089,652	1,572,691	1,441,258 <sup>2</sup>	1,364,352 <sup>2</sup>
1907.	8,320,419	7,714,246	2,118,784	1,824,381	—	—
1908.	8,602,903	8,557,065	2,891,582	2,534,794	1,844,371 <sup>4</sup>	2,091,613 <sup>4</sup>
1909.	7,477,921	7,545,400	3,376,893	2,752,774	2,199,984 <sup>4</sup>	2,654,690 <sup>4</sup>
1910.	8,891,005	8,887,620	3,847,322	3,234,941	2,514,698 <sup>4</sup>	2,220,866 <sup>4</sup>
1911.	9,370,854	9,916,934	4,454,190	4,002,826	2,699,603 <sup>4</sup>	2,575,145 <sup>4</sup>
1912.	10,042,001	10,287,992	7,046,675	4,339,540	4,385,831 <sup>4</sup>	4,255,850 <sup>4</sup>
1913.	11,183,302	10,868,026	5,788,070	5,314,849	4,668,754 <sup>4</sup>	4,656,800 <sup>4</sup>
1914.	11,121,382	11,819,311	5,638,659	5,638,659	6,372,540 <sup>6</sup>	5,823,980 <sup>6</sup>
1915.	12,975,732	12,704,362	5,472,955	6,026,596	5,024,936 <sup>6</sup>	5,368,649 <sup>6</sup>
1916.	13,841,339	12,706,333	5,897,807	6,147,780	4,801,064 <sup>6</sup>	5,258,756 <sup>6</sup>
1917.	18,269,597	16,518,223	6,292,986	6,860,355	5,631,910 <sup>6</sup>	5,553,965 <sup>6</sup>
1918.	19,270,122	17,460,404	6,723,013	7,307,727	7,797,153 <sup>6</sup>	6,828,596 <sup>6</sup>
1919.	20,692,166 <sup>3</sup>	21,464,575	8,613,364	8,497,942	8,333,759 <sup>6</sup>	8,125,203 <sup>6</sup>
1920.	25,981,517 <sup>3</sup>	25,880,843	9,870,710	10,602,955	9,903,885 <sup>6</sup>	8,707,833 <sup>6</sup>
Year.	Alberta.		British Columbia.		Totals for all Provinces.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
1869-72 (total 4 yrs.)	\$ —	\$ —	\$ 519,036 <sup>9</sup>	\$ 529,775 <sup>9</sup>	\$ 24,363,134	\$ 15,684,056
1873.	—	—	370,150	372,169	6,785,533	6,869,334
1874.	—	—	372,418	583,360	7,508,284	8,145,194
1875.	—	—	351,241	614,659	7,150,296	7,903,378
1876.	—	—	381,120	728,310	7,198,714	7,903,378
1877.	—	—	408,348	685,046	6,914,975	7,952,362
1878.	—	—	430,786	514,879	6,375,743	7,777,791
1879.	—	—	213,058 <sup>10</sup>	186,715 <sup>10</sup>	6,046,487	7,441,090
1880.	—	—	390,908	446,575	6,922,545	7,366,106
1881.	—	—	397,035	378,779	7,858,698	8,119,701
1882.	—	—	405,583	474,428	8,375,454	8,707,254
1883.	—	—	425,808	594,102	7,613,241	8,732,551
1884.	—	—	503,174	590,629	7,967,554	5,702,930
1885.	—	—	600,399	655,438	8,162,014	8,333,080
1886.	—	—	514,720	772,211	8,599,965	9,054,678

<sup>1</sup>Four months only. Province created Sept. 1st, 1905. <sup>2</sup>Fourteen months ending Feb. 28th, 1907. <sup>3</sup>Includes Capital Revenue for lands which cannot be separated. <sup>4</sup>Twelve months ending Feb. 28th. <sup>5</sup>Fourteen months ending April 30th. <sup>6</sup>Twelve months ending April 30th. <sup>7</sup>Six months. <sup>8</sup>Eighteen months. <sup>9</sup>Six months of 1871 and for the year 1872. <sup>10</sup>Six months.

23.—Statement showing the Ordinary Revenues and Expenditures of the Provincial Governments, for their respective fiscal years 1869-1920—concluded.

Years.	Alberta.		British Columbia.		Total in all Provinces.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
		\$	\$	\$	\$	\$
1887.....	—	—	537,335	731,307	9,101,465	9,614,469
1888.....	—	—	508,252	788,955	9,393,816	9,257,151
1889.....	—	—	698,055	857,545	10,928,865	11,352,882
1890.....	—	—	835,463	954,021	9,928,737	11,132,195
1891.....	—	—	959,248	1,032,104	10,693,815	11,628,453
1892.....	—	—	1,020,002	1,430,920	11,414,913	12,586,664
1893.....	—	—	1,019,206	1,431,438	11,748,516	11,692,475
1894.....	—	—	821,660	1,514,405	10,936,624	12,125,968
1895.....	—	—	896,025	1,906,924	11,206,390	12,386,492
1896.....	—	—	889,765	1,614,723	11,286,792	12,023,944
1897.....	—	—	1,383,048	1,569,071	11,934,061	12,900,776
1898.....	—	—	1,439,623	2,001,032	12,104,247	12,997,341
1899.....	—	—	1,531,639	2,156,474	12,558,875	12,926,175
1900.....	—	—	1,544,108	1,831,205	13,149,125	13,393,957
1901.....	—	—	1,605,920	2,287,821	14,074,991	14,146,059
1902.....	—	—	1,807,925	2,537,373	14,348,387	14,878,407
1903.....	—	—	2,044,630	3,393,182	15,927,031	17,278,137
1904.....	—	—	2,638,260	2,862,794	17,527,111	16,800,482
1905.....	635,976 <sup>1</sup>	162,723 <sup>2</sup>	2,920,462	2,302,418	19,594,560	16,880,959
1906.....	1,425,059 <sup>2</sup>	1,485,914 <sup>2</sup>	3,044,442	2,328,126	23,027,122	21,169,868
1907.....	2,081,828 <sup>2</sup>	2,450,375 <sup>2</sup>	4,444,594	2,849,480	24,994,505	22,450,595
1908.....	2,849,650 <sup>2</sup>	2,823,831 <sup>2</sup>	5,979,035	3,686,350	31,420,983	27,719,131
1909.....	3,135,727 <sup>2</sup>	2,650,441	4,664,501 <sup>3</sup>	3,749,171 <sup>3</sup>	30,205,393	28,167,824
1910.....	2,488,406 <sup>2</sup>	4,002,394	8,874,742	6,382,993	36,490,071	33,783,150
1911.....	3,309,156 <sup>2</sup>	3,437,088	10,492,892	8,194,803	40,706,948	38,144,511
1912.....	4,100,113 <sup>2</sup>	3,956,562	10,745,709	11,180,024	48,163,781	45,183,902
1913.....	5,399,905	5,225,584	12,510,215	15,412,322	51,819,101	53,278,425
1914.....	5,255,276	5,401,595	10,479,259	15,762,912	51,657,239	57,108,888
1915.....	5,143,590	5,714,032	7,974,496	11,942,667	50,247,746	54,677,473
1916.....	5,281,695	6,018,894	6,291,694	10,083,505	50,015,795	53,826,219
1917.....	6,260,106	6,752,504	6,906,784	9,531,740	57,989,984	60,122,485
1918.....	7,660,762	8,303,808	8,882,845	9,023,269	69,345,305	66,052,909
1919.....	9,642,739	9,525,749	10,931,279	9,887,745	76,844,307	76,403,973
1920.....	10,919,776	10,423,356	13,861,603	11,568,003	92,653,023	88,250,675

<sup>1</sup>Four months only. Province created Sept. 1st, 1905. <sup>2</sup>Includes small sums of capital revenue and expenditure which cannot be separated. <sup>3</sup>Nine months only, owing to change in fiscal year.

24.—Annual Ordinary Receipts and Expenditure of the Provincial Governments per head of population, 1918-1920.

Provinces.	Revenue.			Expenditure.		
	1918.	1919.	1920.	1918.	1919.	1920.
Prince Edward Island.....	\$ 514,475	\$ 501,915	\$ 740,973	\$ 484,416	\$ 655,409	\$ 660,774
Per head.....	5.72	5.61	8.32	5.39	7.33	7.42
Nova Scotia.....	2,332,634	3,280,313	3,801,016	2,573,797	3,280,282	3,916,848
Per head.....	4.55	6.35	7.31	5.02	6.35	7.53
New Brunswick.....	2,357,909	2,182,420	3,100,892	2,399,062	2,595,937	2,969,323
Per head.....	6.27	5.74	8.08	6.38	6.83	7.73
Quebec.....	13,806,392	12,666,352	14,472,651	11,671,830	12,371,131	13,520,740
Per head.....	6.14	5.54	6.23	5.19	5.41	5.82
Ontario.....	19,270,122	20,692,166	25,981,517	17,460,404	21,464,575	25,880,843
Per head.....	6.87	7.27	8.99	6.23	7.54	8.96
Manitoba.....	6,723,013	8,613,364	9,870,710	7,307,727	8,497,942	10,602,955
Per head.....	11.68	14.67	16.49	12.69	14.48	17.72
Saskatchewan.....	7,797,153	8,333,759	9,903,885	6,828,596	8,125,203	8,707,833
Per head.....	11.28	11.69	13.47	9.88	11.39	11.85
Alberta.....	7,660,762	9,642,739	10,919,776	8,303,808	9,525,749	10,423,356
Per head.....	14.38	17.50	19.17	15.59	17.28	18.30
British Columbia.....	8,882,845	10,931,279	13,861,603	9,023,269	9,887,745	11,568,003
Per head.....	18.36	21.99	27.14	18.65	19.89	22.65
Totals.....	69,345,305	76,844,307	92,653,023	66,052,909	76,403,973	88,250,675
Per head.....	8.34	9.08	10.75	7.94	9.02	10.24

NOTE.—In making the calculations for this Table the Bureau of Statistics' estimates of the populations of the provinces, based upon the results of the census of 1921, have been used.



## 25.—Classified Summary Statement of Ordinary Receipts of Provincial

Receipts.	Prince Edward Island.				
	1916.	1917.	1918.	1919.	1920.
Subsidies and other payments from Dominion Government.....	\$ 372,182	\$ 372,182	\$ 372,182	\$ 372,182	\$ 372,182
Agriculture.....	327	289	5,908	1,811	663
Lands.....	789	619	785	802	1,014
Mines and Mining.....	—	—	—	—	—
Woods, Forest and Timber.....	—	—	—	—	—
Game and Fisheries.....	17	—	17	—	—
Fines, Penalties and Forfeitures.....	1,787	898	302	35	95
Fees (other than succession duties).....	10,141	9,474	9,150	10,923	13,103
Succession duties.....	10,213	4,199	3,422	3,088	7,936
Taxation of Corporations, etc.....	102,554	97,449	108,543	87,839	245,573
Licenses and Permits.....	2,262	1,442	11,580	27,378	86,024
Education.....	—	—	—	—	—
Charities, Hospitals and Corrections.....	6,303	6,557	8,007	7,130	10,178
Interest.....	—	—	—	—	—
Refunds and Repayments.....	117	1,747	41	42	28
Miscellaneous.....	1,763	1,148	7,189	2,079	4,177
<b>Total Ordinary Receipts.....</b>	<b>508,455</b>	<b>496,053</b>	<b>514,475<sup>1</sup></b>	<b>501,915<sup>1</sup></b>	<b>740,973</b>

Receipts.	Quebec.				
	1916.	1917.	1918.	1919.	1920.
Subsidies and other Receipts from Dominion Government.....	\$ 2,027,904	\$ 2,027,991	\$ 2,028,028	\$ 2,028,069	\$ 2,028,163
Agriculture.....	29,951	35,522	23,880	34,647	24,875
Lands.....	116,770	178,880	191,889	485,571	425,468
Mines and Mining.....	22,369	30,740	128,864	278,309	378,480
Woods, Forest and Timber.....	1,689,558	1,574,353	1,418,191	2,029,361	2,610,324
Game and Fisheries.....	136,061	151,405	209,313	231,981	291,719
Fines, Penalties and Forfeitures.....	15,587	12,032	31,045	30,404	57,154
Fees (other than succession duties).....	982,688	938,239	743,810	898,534	1,062,503
Succession Duties.....	1,375,804	1,741,263	4,736,548	1,459,015	1,786,931
Taxation of Corporations, etc.....	1,145,853	1,236,470	1,405,215	1,711,904	1,854,528
Licenses and Permits.....	1,288,769	1,815,301	2,025,554	2,236,444	2,694,242
Education.....	—	—	—	—	—
Charities, Hospitals and Corrections.....	290,936	188,942	273,772	664,891	450,047
Interest.....	135,859	118,771	179,276	141,249	146,249
Refunds and Repayments.....	111,978	94,154	92,671	109,937	172,514
Miscellaneous.....	277,897	297,051	318,336	326,036	489,454
<b>Total Ordinary Receipts.....</b>	<b>9,647,984</b>	<b>10,441,114</b>	<b>13,806,392<sup>1</sup></b>	<b>12,665,352</b>	<b>14,472,651</b>

Receipts.	Saskatchewan.				
	1916.	1917.	1918.	1919.	1920.
Subsidies and other receipts from Dominion Government.....	\$ 1,950,660	\$ 1,983,721	\$ 2,207,696	\$ 2,307,148	\$ 2,654,840
Agriculture.....	21,659	18,179	15,548	23,378	37,203
Lands.....	—	—	—	—	—
Mines and Mining.....	—	—	—	40	—
Woods, Forest and Timber.....	—	—	—	—	—
Game and Fisheries.....	21,126	24,148	19,777	23,604	28,984
Fines, Penalties and Forfeitures.....	44,464	54,234	67,343	98,182	84,079
Fees (other than succession duties).....	1,001,148	1,132,828	1,033,193	962,933	1,071,411
Succession Duties.....	44,380	69,996	117,335	154,680	278,970
Taxation of Corporations, etc.....	294,326	348,563	1,301,664	2,491,909	3,439,915
Licenses and Permits.....	348,044	534,026	1,325,106	801,171	746,049
Education.....	43,134	37,238	47,058	43,967	28,990
Charities, Hospitals and Corrections.....	16,948	51,286	94,989	92,549	84,362
Interest.....	410,682	483,082	699,062	539,878	674,693
Refunds and Repayments.....	218,042	369,596	367,863	18,315	90,238
Miscellaneous.....	386,451	525,013	500,519	776,005	684,151
<b>Total Ordinary Receipts.....</b>	<b>4,801,064</b>	<b>5,631,910</b>	<b>7,797,153</b>	<b>8,833,759</b>	<b>9,903,885</b>

<sup>1</sup> These totals are exclusive of the Motor Vehicle Tax, amounting in 1918 to \$12,651 and in 1919, to \$11,344 net, transferred to the Public Works Department and earmarked for highway improvement.

<sup>2</sup> These totals include capital revenue to the amount of \$787,394 in 1919 and \$903,422 in 1920, received from the Department of Lands and Forests, and not separable into its items.

# PROVINCIAL PUBLIC FINANCE

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Governments for their respective fiscal years 1916, 1917, 1918, 1919, 1920.

Nova Scotia.					New Brunswick.				
1916.	1917.	1918.	1919.	1920.	1916.	1917.	1918.	1919.	1920.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
636,667	636,667	636,667	636,667	636,667	637,976	637,976	637,976	637,976	637,976
9,487	11,789	14,509	19,546	21,907	3,713	21,095	179,743	17,071	2,399
20,923	20,331	24,010	42,002	52,878	2,414	336	323	51	561
814,258	740,687	656,989	622,420	690,518	25,547	27,944	46,767	36,809	34,062
—	—	—	—	—	444,247	412,392	591,872	685,276	1,385,420
2,390	3,307	2,291	1,420	4,843	66,395	69,547	53,027	76,162	82,135
836	470	1,404	23,828	6,729	1,321	8,769	29,489	48,040	75,753
35,564	38,604	61,232	82,341	199,783	44,208	47,430	48,361	59,898	78,496
161,450	130,870	117,393	180,962	195,600	77,952	30,436	90,418	79,325	90,610
76,175	96,085	149,894	398,225	349,210	108,742	111,832	310,869	187,734	266,536
54,147	71,844	193,116	292,333	449,076	88,307	78,884	126,593	191,695	290,517
41,579	61,626	59,701	79,658	105,754	19,608	25,674	23,302	21,553	25,891
145,513	153,898	242,846	406,552	505,124	51,971	52,733	62,359	72,194	81,656
162,856	158,010	166,369	158,333	209,866	—	6,711	8,064	6,621	23,564
853	675	312	1,100	274	945	594	742	723	770
2,635	3,757	5,901	424,926	372,787	7,073	9,961	148,004	61,072	24,546
<b>2,165,338</b>	<b>2,118,620</b>	<b>2,332,634</b>	<b>3,280,313</b>	<b>3,801,016</b>	<b>1,580,419</b>	<b>1,572,814</b>	<b>2,357,909</b>	<b>2,182,420</b>	<b>3,100,892</b>
Ontario.					Manitoba.				
1916.	1917.	1918.	1919.	1920.	1916.	1917.	1918.	1919.	1920.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2,469,885	2,469,931	2,469,977	2,470,064	2,470,160	1,582,209	1,643,642	1,731,301	1,859,034	2,002,169
12,275	25,793	179,449	86,139	65,771	9,312	2,433	5,821	7,630	6,234
141,261	134,613	95,366	127,363	148,767	157,010	162,330	166,858	106,838	125,305
322,359	1,694,465	1,054,066	762,493	1,113,545	—	—	—	—	—
1,341,446	1,703,425	1,776,377	1,837,272	2,731,549	—	—	—	—	—
165,496	215,810	480,009	680,979	791,537	35,774	27,154	25,151	36,933	53,377
54,884	55,549	100,110	111,253	99,748	50,711	77,814	87,147	109,971	139,658
516,075	514,379	631,380	686,365	1,042,908	340,174	338,292	320,116	433,441	584,685
2,451,794	3,228,226	3,157,567	3,526,592	4,014,468	304,497	306,453	350,310	193,485	319,556
2,590,081	3,829,595	3,990,637	3,919,916	2,666,198	474,801	591,961	626,777	897,797	991,258
1,452,029	1,893,867	2,070,194	2,851,587	5,804,830	157,330	223,253	402,028	613,070	770,410
162,824	149,568	149,176	192,510	495,425	119,102	148,408	139,037	229,211	260,953
281,184	536,408	863,270	876,597	1,345,456	137,805	152,146	159,924	185,262	197,773
178,577	136,018	109,774	289,470	258,624	604,029	700,102	783,312	822,163	762,681
133,026	104,710	63,411	52,209	214,034	8,410	3,528	629	7,763	3,866
1,567,143	1,577,240	2,079,359	2,221,357	3,215,497	1,916,643	1,915,470	2,077,409	3,110,763	3,652,785
<b>3,841,339</b>	<b>3,269,597</b>	<b>19,270,122</b>	<b>20,692,166</b>	<b>25,981,517</b>	<b>5,897,807</b>	<b>6,292,956</b>	<b>6,723,013</b>	<b>8,613,364</b>	<b>9,870,710</b>
Alberta.					British Columbia.				
1916.	1917.	1918.	1919.	1920.	1916.	1917.	1918.	1919.	1920.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
758,302	1,915,527	1,999,772	2,207,646	2,313,104	723,135	723,135	648,135	623,135	623,135
84,867	103,108	157,140	141,639	112,660	32,777	30,041	50,929	51,060	44,116
—	—	—	—	—	206,386	308,473	484,388	227,674	436,821
1,713	8,963	137,527	213,082	286,499	480,615	631,927	643,622	620,522	550,261
22,338	25,306	28,757	35,803	35,462	1,710,023	1,968,787	2,079,611	2,582,549	2,455,000
82,101	110,877	116,458	130,962	179,342	106,034	104,977	106,554	119,590	156,816
654,626	677,064	792,614	1,005,640	1,094,027	—	—	900	—	—
148,832	142,605	200,072	167,246	267,336	511,559	472,254	426,240	463,559	742,792
708,239	1,077,924	1,511,855	2,043,027	2,914,982	139,907	277,703	241,363	271,777	374,321
205,348	388,211	663,991	1,096,808	1,404,037	1,716,777	1,718,228	3,323,170	4,556,937	6,479,499
27,284	33,002	35,687	57,602	41,578	188,533	220,178	356,780	504,245	721,594
16,765	35,124	6,638	6,728	10,255	2,390	1,725	3,105	4,044	4,993
204,335	180,006	166,878	118,937	181,218	37,640	42,709	60,491	74,614	94,350
285,590	341,617	425,322	673,633	92,218	276,894	201,709	269,493	484,870	738,896
181,355	1,220,769	1,418,051	1,743,986	1,987,058	16,259	35,908	11,025	25,211	19,769
—	—	—	—	—	142,765	169,030	177,039	321,492	419,240
<b>281,695</b>	<b>6,260,106</b>	<b>7,660,762</b>	<b>9,642,739</b>	<b>10,919,776</b>	<b>6,291,694</b>	<b>6,906,784</b>	<b>8,882,845</b>	<b>10,931,279</b>	<b>13,861,603</b>

NOTE.—For combined receipts of all provinces see Table 27.

## 26.—Classified Summary Statement of Ordinary Expenditures of

Service.	Prince Edward Island.				
	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Civil Government.....	27,351	24,814	25,362	29,988	42,677
Legislation.....	17,725	18,822	17,999	24,460	31,729
Agriculture.....	15,099	12,660	16,928	26,066	17,621
Lands.....	—	—	—	—	—
Mines and Mining.....	—	—	—	—	—
Forest, Timber and Woods.....	—	—	—	—	—
Game and Fisheries.....	—	—	—	—	—
Administration of Justice, Special Legal Administration and Inquiry.....	30,412	30,262	26,799	29,015	34,010
Conservation of Health and Sanitation.....	751	1,610	2,382	4,304	956
Public Buildings, Public Works and Enterprises.....	63,065	69,007	66,612	159,561	130,078
Education.....	173,309	176,952	170,913	183,344	209,478
Hospitals.....	60,752	90,038	91,361	121,385	121,866
Correctional Institutions.....	—	—	—	—	—
Charities.....	4,545	5,730	5,669	5,385	4,961
Pensions, Gratuities and Reliefs.....	700	700	700	700	992
Recreation and Amusement.....	—	—	—	—	—
Colonization, Immigration and Publicity.....	—	—	70	400	—
Refunds.....	45,899	46,799	49,680	50,801	56,498
Interest Payments.....	—	—	—	—	—
Sinking Funds.....	13,543	9,715	9,941	20,000	9,908
Miscellaneous Payments.....	—	—	—	—	—
<b>Total Ordinary Expenditure.....</b>	<b>453,151</b>	<b>487,113</b>	<b>484,416</b>	<b>655,409</b>	<b>660,774</b>

Service.	Quebec.				
	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Civil Government.....	626,418	650,230	693,377	719,677	807,733
Legislation.....	532,532	495,843	482,469	666,795	585,600
Agriculture.....	425,844	451,744	645,274	602,800	824,200
Lands.....	216,732	220,776	260,526	266,756	326,707
Mines and Mining.....	16,500	16,500	16,500	16,500	16,500
Forest, Timber and Woods.....	153,786	154,395	171,909	181,761	272,114
Game and Fisheries.....	54,470	59,305	65,235	86,255	92,500
Administration of Justice, Special Legal Administration and Inquiry.....	1,431,326	1,451,439	1,578,850	1,577,815	1,775,321
Conservation of Health and Sanitation.....	31,277	34,954	69,313	53,386	87,185
Public Buildings, Public Works and Enterprises.....	1,503,859	1,524,898	2,127,506	2,303,996	3,032,754
Education.....	1,598,097	1,637,317	1,668,425	1,666,470	1,760,262
Hospitals.....	633,325	666,298	1,023,556	1,020,784	1,022,446
Correctional Institutions.....	145,000	184,936	185,000	243,665	226,500
Charities.....	69,885	72,385	72,445	72,945	76,025
Pensions, Gratuities and Reliefs.....	87,414	106,527	184,318	83,680	95,084
Recreation and Amusement.....	8,320	8,120	221,190	264,256	12,181
Colonization, Immigration and Publicity.....	49,897	55,540	52,850	74,586	71,017
Refunds.....	13,515	7,888	10,064	10,063	7,220
Interest Payments.....	1,435,812	1,630,926	1,656,539	1,668,563	1,802,766
Sinking Funds.....	121,712	157,711	167,057	178,211	186,036
Miscellaneous Payments.....	275,666	319,910	319,427	612,167	440,595
<b>Total Ordinary Expenditure.....</b>	<b>9,436,687</b>	<b>9,907,672</b>	<b>11,671,530</b>	<b>12,371,131</b>	<b>13,520,740</b>

Provincial Governments for their respective fiscal years 1916-1920.

Nova Scotia.					New Brunswick.				
1916.	1917.	1918.	1919.	1920.	1916.	1917.	1918.	1919.	1920.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
123,525	126,796	142,019	168,773	215,455	68,342	79,400	99,450	123,173	145,720
102,971	97,082	88,618	104,900	142,865	54,921	68,236	59,650	59,536	117,936
35,798	36,960	42,641	58,461	46,116	49,072	76,209	251,089	84,482	92,912
266	115	64	94	146	4,015	3,568	6,068	6,205	10,295
42,584	40,472	21,271	23,418	33,442	2,425	717	920	3,759	998
2,550	2,550	2,600	2,600	3,050	30,095	27,648	35,068	84,432	123,233
1,500	1,500	1,500	1,500	1,500	31,858	36,427	38,422	47,669	49,654
25,660	25,670	28,333	32,410	36,095	46,557	44,059	40,216	59,531	46,407
—	—	—	—	3,618	—	412	5,731	—	—
356,499	403,665	460,772	871,717	1,134,096	354,308	527,225	544,871	821,741	908,962
508,957	527,272	522,941	531,104	610,870	313,409	319,906	329,564	326,275	362,067
314,074	352,288	501,962	668,257	751,215	142,225	176,978	208,444	186,059	213,717
—	—	—	—	—	—	—	—	—	—
15,175	16,477	17,755	21,434	29,601	2,972	2,572	5,700	8,619	29,096
9,284	9,076	7,974	8,350	9,578	6,533	5,883	17,561	10,110	17,873
2,009	3,921	4,963	6,280	10,322	1,150	1,300	4,626	10,346	9,287
10,341	10,339	10,778	12,587	16,430	11,211	13,496	8,356	8,613	8,507
5,331	13,151	15,056	12,224	15,894	1,719	1,592	905	2,607	1,060
505,642	540,139	560,987	599,211	616,643	351,005	686,714	644,438	628,892	679,294
40,669	77,852	77,448	76,826	103,490	31,613	33,231	31,336	31,335	31,080
49,938	58,684	66,115	80,136	135,822	64,910	61,331	66,647	92,553	121,255
2,152,773	2,344,009	2,573,797	3,280,282	3,916,848	1,568,340	2,166,964	2,399,062	2,595,937	2,969,323

Ontario.					Manitoba.				
1916.	1917.	1918.	1919.	1920.	1916.	1917.	1918.	1919.	1920.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
865,226	939,259	1,066,950	1,261,382	1,550,665	238,079	274,778	328,119	396,343	479,272
361,950	336,435	359,885	412,136	412,798	206,694	251,412	160,026	148,031	306,360
446,828	487,330	611,525	687,685	741,115	58,684	72,880	87,924	134,166	218,402
64,104	70,159	69,593	72,397	80,830	—	—	10,835	12,092	19,623
131,260	86,116	134,236	123,269	129,019	—	—	—	—	—
427,756	668,119	716,375	867,192	972,978	—	—	—	—	—
131,952	128,199	399,307	477,004	429,593	22,795	28,689	25,684	24,039	18,319
761,103	694,784	746,654	741,812	908,664	507,886	499,915	465,176	612,786	800,098
49,211	62,579	83,702	105,543	269,641	30,000	35,000	—	10,000	30,000
1,043,146	1,213,768	1,040,026	1,416,919	1,406,257	2,004,185	2,131,745	2,351,933	2,761,473	3,031,763
2,592,927	2,856,409	3,170,625	3,746,563	5,469,679	1,068,910	1,213,128	1,301,124	1,459,710	1,744,713
1,497,165	2,015,610	2,085,990	2,559,138	3,216,009	230,161	265,205	305,358	377,479	521,738
286,302	379,815	538,461	691,779	604,671	39,347	47,829	56,876	70,831	101,714
205,339	212,969	218,804	225,548	323,660	221,155	247,339	243,498	258,942	293,464
24,298	16,400	6,175	12,475	48,635	30,993	73,052	112,715	226,732	399,214
16,291	21,252	50,560	79,772	178,470	2,964	13,015	21,129	20,956	25,750
43,791	46,455	41,745	67,661	100,019	38,227	68,408	51,443	37,101	69,595
90,932	74,018	55,878	58,331	187,525	8,674	1,997	2,719	10,891	5,623
—	—	—	—	—	1,327,220	1,453,843	1,686,325	1,771,457	2,338,949
3,666,752	6,178,547	6,063,913	7,857,664	8,850,615	111,806	182,120	96,843	164,913	135,346
12,706,333	16,518,223	17,460,404	21,461,575	25,880,843	6,147,780	6,860,355	7,307,727	8,497,942	10,602,555



## 26.—Classified Summary Statement of Ordinary Expenditures of

Service.	Saskatchewan.				
	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Civil Government.....	457,183	444,004	534,145	711,678	789,171
Legislation.....	231,868	149,901	344,443	203,975	214,131
Agriculture.....	192,811	159,642	131,876	119,878	208,006
Lands.....	52,271	42,877	1,903	31,565	51,094
Mines and Mining.....	756	—	—	—	—
Forest, Timber and Woods.....	—	—	—	—	—
Game and Fisheries.....	12,557	9,501	10,582	11,304	19,482
Administration of Justice, Special Legal Administration and Inquiry.....	898,106	1,019,806	988,649	916,183	1,107,208
Conservation of Health and Sanitation.....	—	—	24,416	13,666	27,184
Public Buildings, Public Works and Enterprises.....	597,690	855,304	1,157,980	1,147,221	1,321,738
Education.....	1,003,944	986,798	1,052,944	1,192,697	1,434,923
Hospitals.....	325,143	345,771	526,794	538,073	723,458
Correctional Institutions.....	9,333	10,571	12,561	14,905	24,831
Charities.....	20,500	26,980	76,396	96,308	65,484
Pensions, Gratuities and Reliefs.....	—	7,400	30,353	74,258	52,304
Recreation and Amusement.....	3,075	3,620	6,627	6,047	11,497
Colonization, Immigration and Publicity.....	—	—	—	—	—
Refunds.....	9,103	12,292	1,529	3,022	132,196
Interest Payments.....	893,102	1,067,780	1,096,466	1,222,177	1,337,754
Sinking Funds.....	75,608	74,361	75,079	192,071	187,660
Miscellaneous Payments.....	475,706	337,357	755,853	1,630,175	999,712
<b>Total Ordinary Expenditure.....</b>	<b>5,258,756</b>	<b>5,553,965</b>	<b>6,828,596</b>	<b>8,125,203</b>	<b>8,707,833</b>

## 27. —Combined Itemized Summary Statement of Ordinary Receipts and Expenditures

## RECEIPTS.

Items.	Totals.				
	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Subsidies and other Receipts from Dominion Government.....	12,158,920	12,410,772	12,731,734	13,141,921	13,738,396
Agriculture.....	204,368	248,249	632,027	382,921	315,828
Lands.....	645,553	805,582	963,619	990,301	1,190,814
Mines and Mining.....	1,666,861	3,134,726	2,667,835	2,533,675	3,053,365
Woods, Forests and Timber.....	5,185,274	5,689,457	5,866,051	7,134,458	9,182,293
Game and Fisheries.....	555,631	621,654	924,896	1,206,472	1,444,873
Fines, Penalties and Forfeitures.....	251,691	320,643	434,198	552,675	642,558
Fees (other than Succession duties).....	4,096,183	4,168,564	4,066,096	4,603,634	5,889,708
Succession Duties.....	4,714,829	5,931,754	8,861,621	6,036,123	7,335,728
Taxation of Corporations, etc.....	7,217,548	9,108,156	12,728,624	16,205,308	19,207,699
Licenses and Permits.....	3,785,769	5,227,006	7,174,942	8,614,731	12,466,779
Education.....	415,921	447,241	457,066	628,745	963,584
Charities, Hospitals and Corrections.....	985,065	1,219,803	1,772,296	2,386,517	2,782,201
Interest.....	1,973,232	1,984,409	2,332,228	2,561,521	2,995,791
Refunds and Repayments.....	775,225	952,529	962,016	888,933	593,711
Miscellaneous.....	5,383,725	5,719,439	6,731,807	8,987,716	10,849,695
<b>Total Ordinary Receipts.....</b>	<b>50,015,795</b>	<b>57,989,984</b>	<b>69,345,305</b>	<b>76,844,307</b>	<b>92,653,023</b>

<sup>1</sup>These totals are exclusive of the Motor Vehicle Tax in Prince Edward Island, which amounted in 1918 to \$12,651 and in 1919, to \$11,344 net, and was transferred to the Public Works Department and earmarked for highway improvement.

<sup>2</sup>These totals include capital revenue in Ontario to the amount of \$787,394 in 1919 and \$903,422 in 1920, received from the Department of Lands and Forests, and not separable into its items.

Provincial Governments for their respective fiscal years 1916-1920—concluded.

Alberta.					British Columbia.				
1916.	1917.	1918.	1919.	1920.	1916.	1917.	1918.	1919.	1920.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
528,787	589,724	611,423	722,933	822,660	1,076,790	1,027,577	932,418	1,497,939	1,980,580
157,069	341,071	171,460	175,494	202,993	167,370	277,528	179,958	181,317	163,532
543,861	628,404	798,825	1,096,427	460,767	169,682	132,368	138,620	99,851	103,574
5,854	5,916	40,859	71,500	57,271	84,032	84,185	66,552	160,158	224,855
31,843	33,804	49,009	41,781	51,258	13,727	62,491	143,491	136,755	175,655
—	—	—	—	—	241,885	102,464	188,620	143,791	149,723
26,919	29,707	24,745	26,785	30,530	90,803	81,616	64,771	26,994	21,611
731,415	880,919	879,050	1,010,693	1,152,552	749,834	667,237	519,086	579,912	728,086
13,152	14,866	63,848	125,760	110,538	24,613	21,872	20,808	52,666	46,849
1,567,491	1,673,410	1,513,256	2,037,326	2,463,959	3,162,130	2,877,080	1,562,588	1,835,320	2,247,809
1,094,132	1,191,979	1,209,629	1,439,847	1,768,834	1,610,867	1,640,886	1,716,840	1,995,309	2,541,349
174,772	180,930	308,181	360,333	515,975	558,917	744,559	706,471	1,019,115	1,013,094
39,508	49,992	59,309	67,090	92,176	101,630	80,592	81,122	99,972	132,964
19,342	18,687	32,063	35,002	37,917	109,215	78,448	78,758	80,805	100,962
—	5,000	2,150	39,872	163,284	37,922	53,186	94,712	65,800	54,306
—	—	—	—	—	8,273	7,975	12,004	18,753	20,263
15,048	16,396	16,288	5,660	2,695	45,686	40,462	68,770	76,580	75,847
5,178	8,365	7,531	202,411	11,632	25,245	7,292	29,731	5,935	12,627
855,451	913,401	1,417,299	1,516,842	1,771,846	782,802	830,422	946,728	1,175,502	1,437,629
87,285	97,500	152,976	157,501	162,501	202,842	452,423	780,149	—	—
121,787	72,433	945,907	392,492	543,938	819,240	455,077	691,072	605,271	336,688
6,018,894	6,752,504	8,303,808	9,525,749	10,423,356	10,083,505	9,531,740	9,023,269	9,887,745	11,568,003

of All Provincial Governments, for their respective fiscal years 1916-1920.

EXPENDITURES.

Service.	Total.				
	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Civil Government.....	4,011,701	4,156,582	4,433,263	5,631,886	6,833,933
Legislation.....	1,833,100	2,036,330	1,864,508	1,976,644	2,177,944
Agriculture.....	1,937,679	2,058,197	2,724,702	2,909,816	2,775,713
Lands.....	427,274	427,596	456,400	620,767	770,821
Mines and Mining.....	239,095	240,100	365,427	345,482	406,872
Forest, Timber and Woods.....	861,072	955,176	1,114,572	1,279,776	1,521,098
Game and Fisheries.....	372,854	374,944	630,246	701,550	663,189
Administration of Justice, Special Legal Administration and Inquiry.....	5,182,299	5,314,091	5,272,813	5,560,157	6,588,441
Conservation of Health and Sanitation.....	149,004	171,293	270,200	395,325	575,971
Public Buildings, Public Works and Enterprises.....	10,652,373	11,076,102	10,825,544	13,355,274	15,678,016
Education.....	9,964,552	10,580,647	11,143,005	12,541,624	15,902,175
Hospitals.....	3,936,834	4,837,677	5,758,117	6,850,623	8,099,518
Correctional Institutions.....	621,120	759,735	933,329	1,188,242	1,182,856
Charities.....	668,128	681,587	751,088	804,988	961,200
Pensions, Gratuities and Reliefs.....	197,144	277,224	456,658	521,977	841,270
Recreation and Amusement.....	42,082	59,203	321,099	406,410	267,779
Colonization, Immigration and Publicity.....	214,201	251,096	250,230	282,788	344,110
Refunds.....	159,697	126,599	123,483	305,884	373,777
Interest Payments.....	6,196,933	7,170,024	8,058,462	8,633,445	10,041,343
Sinking Funds.....	559,729	893,078	1,284,045	635,944	670,767
Miscellaneous Payments.....	5,599,348	7,675,204	9,015,718	11,455,371	11,573,882
<b>Total Ordinary Expenditure.....</b>	<b>53,826,219</b>	<b>60,122,485</b>	<b>66,052,909</b>	<b>76,403,923</b>	<b>88,250,675</b>

## 28.—Assets and Liabilities of the Provincial Governments

## ASSETS.

Items.	Prince Edward Island.	Nova Scotia.
	1920.	1920.
	\$	\$
Principal Assets:—		
(1) Dominion Government.....	893,390	1,207,949
(2) Investments.....	286,444	—
(3) Deposits.....	—	978,643
(4) Cash Balances or in Banks.....	—	—
(5) Utilities, Provincial Ownership.....	—	—
(6) Lands.....	—	—
(7) Loans and Advances.....	—	4,626,750
(8) Miscellaneous.....	—	408,375
<b>Total Principal Assets.....</b>	<b>1,179,834</b>	<b>7,221,717</b>
(9) Other Miscellaneous Assets.....	—	—
(10) Natural Resources.....	—	—

## LIABILITIES.

Direct Liabilities:—		
(1) Dominion Government.....	—	28,729
(2) Debentures.....	733,000	17,202,647
(3) Bonds.....	—	—
(4) Stocks.....	—	—
(5) Treasury Bills.....	—	—
(6) Loans.....	729,714	—
(7) Bank Overdraft and Debit Balances.....	—	572,148
(8) Sinking Funds.....	—	—
(9) Miscellaneous.....	—	7,807
<b>Total Direct Liabilities.....</b>	<b>1,462,714</b>	<b>17,811,331</b>
(10) Indirect Liabilities.....	—	130,541

With regard to the tables showing assets and liabilities of the Provincial Governments the following list of items shows the classification of accounts which are included in the statement:—

## ASSETS.

- (1) DOMINION GOVERNMENT, including (a) Provincial Debt Account, (b) Land Account (c) Housing Act, (d) Common School Fund, (e) School Land Trust Fund, (f) Annual Subsidy, (g) Grant per Capita, (h) Provincial Aid to Highways, (i) Provincial Aid Technical Education Maintenance.
- (2) INVESTMENTS, including (a) Sinking Funds, (b) Inscribed Stock, (c) Victory Bonds, (d) Railway, (e) Debentures, (f) Registered Stock, (g) War Loan—Dominion, (h) Court House Bonds, (i) Farm Loans Association, (j) Land Titles Assurance Fund, (k) Miscellaneous.
- (3) DEPOSITS, including (a) Sinking Funds, (b) Bank Balances, (c) Special Deposits, Trust Accounts
- (d) Special Deposits, Bank Liquidation.
- (4) CASH BALANCES or in Banks.
- (5) UTILITIES, PROVINCIAL OWNERSHIP, including (a) Telephones, (b) Grain Elevators, (c) Hydro Electric Power, (d) Railways.
- (6) LANDS, including (a) Crown Lands, amounts outstanding and Interest, (b) Former Indian Reservations, (c) Other Lands including Soldiers' Land Act, Railway Subsidy Land repurchased and Fairview Works, Fairview, B.C., (d) Timber Dues, Bonus, etc., amounts outstanding, (e) Farm Settlement Board Land.
- (7) LOANS AND ADVANCES, including (a) Co-operative Creameries, (b) Co-operative Elevator Companies, (c) Railway Loans and Interest receivable, (d) Railways, (e) Advances, Trust Accounts, etc., (f) Advances, (g) City of Regina, (h) Education County Loan, (i) Public Utilities, (j) Due from Capital to Current being amount advanced, (k) Other Loans, (l) Power Commission Temporary Loan.
- (8) MISCELLANEOUS, including (a) Deferred Revenue, (b) Deferred Charges. (c) Royalties (Mining), (d) Railway earnings—accounts receivable, (e) Trust Funds—cash for railway bondholders, (f) Drainage and Judicial Districts, (g) Dyking Assessments Adjustment Act, (h) Secured Accounts (i) Education School Book Inventory, (j) Taxes uncollected, (k) Accounts receivable and Inventories, (l) Hospitals, accounts receivable, etc. (m) Amounts available for Specific Capital Outlay, (n) Outstanding Revenue, (o) Patriotic Purposes, (p) Miscellaneous.
- (9) OTHER MISCELLANEOUS ASSETS, including (a) Provincial Government Buildings and Sites, (b) Roads and Bridges, (c) Demonstration Farms, (d) Surveys, (e) Appropriation of Revenue, Cash for extinguish-

at the close of their respective fiscal years ending in 1920.

## ASSETS.

New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
1920.	1920.	1920.	1920.	1920.	1920.	1920.
\$	\$	\$	\$	\$	\$	\$
1,749,299	1,173,006	7,374,046	15,504,126	34,997,189	21,495,956	12,462,701
8,815,267	1,938,611	25,116,132	7,067,519	6,818,138	171,669	5,837,601
-	237,752	5,671,394	-	2,539,467	-	3,257,583
-	1,783,842	-	57,416	-	845,237	2,838,899
150,000	3,193,923	65,491,878	17,139,867	9,120,407	15,584,395	-
1,053,086	349,136	2,275,000	635,619	3,456,687	7,004,179	3,526,210
803,632	5,000	1,684,039	14,045,269	286,917	3,997,510	12,765,466
						5,064,693
<b>12,571,284</b>	<b>8,681,270</b>	<b>107,612,489</b>	<b>55,019,816</b>	<b>57,218,805</b>	<b>49,998,946</b>	<b>45,753,153</b>
13,141,421	4,291,487	35,371,115	21,212,511	18,411,234	18,181,518	21,347,503
-	-	503,000,000	-	41,349,529	83,146,428	-

## LIABILITIES.

1,340,888	1,583,610	10,750,000	-	-	-	898,496
11,914,698	-	-	-	-	-	16,125,000
6,954,396	81,600	89,525,000	49,700,870	28,230,980	37,060,940 <sup>1</sup>	-
1,814,142	-	8,911,900	-	7,006,190	4,928,960 <sup>1</sup>	17,196,936
-	-	15,000,000	4,769,000	1,500,000	-	-
-	45,708,114	-	-	-	3,774,900	2,670,000
1,500,953	-	-	-	632,000	-	-
960,767	-	-	4,348,474	-	54,122	-
2,184,920	1,383,440	4,004,854	1,747,390	646,833	-	6,802,933
<b>26,670,764</b>	<b>48,756,764</b>	<b>128,191,754</b>	<b>60,565,734</b>	<b>38,016,003</b>	<b>44,587,763</b>	<b>43,693,265</b>
1,117,000	4,124,500	31,560,300	30,466,362	-	-	65,407,227

<sup>1</sup>Less Sinking Fund of \$1,231,159.

ment of Government Stocks and Bonds, (f) Public Improvements, (g) Royal Commissions, (h) Patriotic Purposes, (i) Other Expenditures, (j) Miscellaneous.

(10) NATURAL RESOURCES, including (a) Pine Timber, (b) Pulpwood, Timber, Ties, Poles, Hardwood, etc., (c) Mining Lands and Profits, (d) Agricultural Lands, (e) Water Powers, (f) Sand, gravel, etc., (g) District of Patricia area 146,000 sq. miles Timber, Fisheries, Fees and Mining Possibilities, (h) Unsold school lands.

## LIABILITIES.

(1) DOMINION GOVERNMENT, including (a) Agricultural Aid, unexpended Balance, (b) Administration Agricultural Aids Act, (c) Housing Act Loan, (d) Dominion Subsidy Paid in Advance, (e) Balance of Account, 1902, (f) Purchase of Property Q.-M. O. Railway, (g) Loans, (h) Public Health Aid unexpended Balance.

(2) DEBENTURES, including (a) Provincial, (b) Administration Farms Loans Act.

(3) BONDS, including (a) Provincial, (b) Court House, (c) Government Bonds and Stock, (d) Profit on Bond Conversion.

(4) STOCKS, including (a) Stock inscribed (London, England), (b) Registered, (c) Stocks.

(5) TREASURY BILLS.

(6) LOANS, including (a) Short Term Special, (b) Loan Account, (c) Due Bank, (d) Temporary Loans, (e) Loans (Funded Debt).

(7) BANK OVERDRAFTS AND DEBIT BALANCES.

(8) SINKING FUNDS, including (a) Replacement reserves, (b) Municipal, (c) Invested.

(9) MISCELLANEOUS, including (a) Certificates (Railway and Annuity), (b) Trust Funds and Deposits, (c) Mortgages (B.C. Building, London, England), (d) Interest (1) on securities (2) accrued (not due), (e) Supplementary Revenue Fund, (f) School Grants, (g) Amounts Payable, (h) Licenses paid in advance, (i) Liabilities for Capital Expenditure, (including Railways, Bridges, Roads, etc.), (j) Outstanding Warrants, (k) Miscellaneous.

(10) INDIRECT LIABILITIES, including (a) Guarantee of Bonds and Loans in Nova Scotia, (b) Bonds guaranteed by Province of New Brunswick, (c) Debentures and Loans for Railways, Institutions, Schools, etc., in Quebec, (d) Guarantees of Debentures for Toronto University, Niagara Falls Park, Toronto and Hamilton Highway Commission, Towns of Bruce Mines, Cochrane and Matheson, Township of Tisdale, Separate School Board, Town of Timmins and Hydro-Electric Power Commission for Ontario, (e) Principal and Interest guaranteed for C.N.R. Securities, Municipal Debentures and Manitoba Farm Loan Association Securities (in addition interest only has been guaranteed on Municipal Debentures par value \$99,500, also rentals payable to N.R. Ry. Co. for certain railways leased) in Manitoba, (f) Guarantees of Principal and Interest on Securities, Railways, Sewerage and Drainage Board, Drying Districts, War Reduction Co. and Agricultural Credits Commission in province of British Columbia.



### MUNICIPAL PUBLIC FINANCE.

The statistics of the rural and urban population of Canada appearing on page 101 of this issue of the Year Book, show that between 1901 and 1921, the urban population of Canada more than doubled, increasing from 2,014,222 to 4,352,442; further, this growth has been greater in the cities, more especially the larger cities, than in the towns and villages. The aggregation of great numbers of people into the cities within a comparatively short space of time has made it necessary for costly public services to be furnished to the new-comers. Problems of water supply, road and bridge building, police and fire protection, sanitation and sewage, transportation, education, public health and recreation, have been faced and more or less satisfactorily solved, often at great expense. Some municipalities, indeed, in the period before the war considered it expedient to provide public services for prospective as well as for existing population, and later found that the prospects did not become actualities as rapidly as they had expected. The results of the great actual growth and the great expectations of growth was a rapid increase in municipal taxation which has made municipal public finance a very important part of the public finance of Canada, attracting a very considerable amount of attention from theoretical students of public finance, from municipal officials, from bond houses and generally from the urban ratepayer.

Investigators of municipal public finance have, however, found great difficulties in pursuing their studies on account of the incomparability of the statistics collected by Provincial Governments, or the entire absence of such statistics, only six provinces compiling and publishing their municipal statistics in 1919. Accordingly, in response to suggestions from the Union of Canadian Municipalities and the Municipal Improvement League of Canada, the Dominion Bureau of Statistics undertook to collect independently through its Finance Branch the statistics for a fixed group of municipalities, of 10,000 population or over, according to schedules and methods of compilation approved by the provinces. The results of the first investigation for the calendar year 1919 were published in summary form on pages 570 to 580 of the 1920 Year Book, as well as in greater detail in a special report.

**Statistics of Urban Municipalities of 10,000 Population and over.**—In the present issue of the Year Book the statistics for 1920 of Canadian cities of 10,000 population and over are printed in considerable detail, a summary of the more important statistics being given by provinces and for the whole country in Table 29, which shows that the 57 cities included in the report had in that year taxable land and buildings assessed at \$2,786,894,948 and tax-exempt land and buildings assessed at \$686,365,646. Their ordinary receipts aggregated \$168,840,792, of which \$94,407,640 were derived from

taxation, being \$33.38 per head of the census population; their extraordinary receipts were \$41,679,648, a total of \$210,520,440, while their grand total expenditure was \$210,692,259. Available and revenue-producing assets amounted to \$389,148,880, and total assets to \$809,861,299, while total liabilities were \$675,610,501. For individual cities statistics of receipts are given in Table 30, of expenditures in Table 31, of assets and liabilities in Table 32.

**Statistics of Urban Municipalities of from 3,000 to 10,000 Population.**—According to the statistics compiled and published by the Finance Branch of the Dominion Bureau of Statistics for urban municipalities with a population of from 3,000 to 10,000, the 103 municipalities of this class reporting had in the calendar year 1919 an estimated population of 552,668. The aggregate value of taxable property was in that year \$280,294,473, and of property exempted from taxation \$108,239,833. The total ordinary receipts of these 103 municipalities were \$15,309,562, of which \$9,380,217 were derived from taxes, being \$16.97 per head of the estimated population. The extraordinary receipts were \$4,476,454, bringing the total receipts up to \$19,786,016. The aggregate ordinary expenditures were \$15,185,024 and extraordinary expenditures \$5,209,137, a grand total of \$20,394,161. The aggregate available assets were \$58,751,681, and the aggregate liabilities \$55,719,411.

**Statistics of Smaller Urban Municipalities of 1,000 to 3,000 Population.**—Statistics have been compiled and published for 1920 by the Finance Branch of the Dominion Bureau of Statistics for 241 towns and villages having an estimated population in that year of between 1,000 and 3,000, and an aggregate estimated population of 419,197. The aggregate value of the taxable property in these municipalities in 1920 was \$227,073,141, and of property exempted from taxation \$49,295,401. The total ordinary receipts of the 241 municipalities were \$10,684,795, of which \$7,375,878 proceeded from taxation, or \$17.59 per head of the estimated population; the total extraordinary receipts were \$5,448,829, bringing the total receipts (including \$35,306 not classified as ordinary or extraordinary) to \$16,168,930. Aggregate ordinary expenditures were \$11,318,446 and extraordinary expenditure \$1,848,881, making the grand total expenditure (including \$32,661 not classified) \$16,199,988. Aggregate available assets were \$37,718,157, and aggregate liabilities \$33,407,405.

All these reports may be obtained on application to the Dominion Statistician.

NOTE.—According to the census of 1921, 55 cities in Canada had at that time a population of 10,000 or over. The municipal authorities of Amherst, Dartmouth and New Glasgow, all in Nova Scotia, and of Shawana and North Bay in Ontario, had previously estimated their populations as being 10,000 or over; they were classified as such in the 1919 report and are here retained for comparative purposes. Three urban municipalities having more than 10,000 population by the census, failed to send in a report and are not included; viz., Guelph, Glace Bay and Shawinigan Falls.

## 29.—Summary by Provinces of Municipal Statistics of Principal Interest of

Schedule.	Prince Edward Island.	Nova Scotia.	New Brunswick.
Number of Cities reporting in each province.....	1	5	3
General Statistics—			
Area in acres.....	850	15,343	32,925
Population (Census 1921).....	12,347	107,788	72,768
Value of Taxable Property (land and buildings)..... \$	5,762,560	72,983,115	48,611,949
Value of Exemptions (land and buildings)..... \$	1,000,000	33,472,800	14,157,000
Incomes assessed for Municipal Income Tax.....	1	812,850	24,933,384
Business assessment..... \$	1	2,014,110	10,332,450
Streets improved, mileage of.....	9	139	38.41
Streets unimproved, mileage of.....	10	138.75	56
Length of streets lighted.....	19	108	75.4
Sidewalks, mileage of.....	24	158.55	134.43
Sewers, mileage of.....	30	132	85.66
Water mains, mileage of.....	22	199.6	146.78
Parks and playgrounds, acreage of.....	40	382.3	79
Estimated value of fire equipment..... \$	15,000	431,647	155,019
Total loss on property by fire..... \$	2	600,650	423,192
Receipts from—			
Taxation..... \$	118,858	1,677,441	2,007,127
Licenses and fees..... \$	7,839	59,175	38,626
Fines, forfeits and escheats..... \$	2,392	74,006	22,284
Municipality owned public services..... \$	16,242	478,258	577,693
Grants, subventions and fees for educational purposes..... \$	1	30,609	1,000
Interest..... \$	1	9,592	8,774
Sinking funds..... \$	1	36,340	89,799
Total ordinary receipts..... \$	147,481	3,987,460	3,133,173
Total extraordinary receipts..... \$	98,253	182,086	823,719
<b>Grand total receipts..... \$</b>	<b>245,734</b>	<b>4,169,546</b>	<b>3,956,892</b>
Expenditures on—			
General government..... \$	11,521	144,550	161,385
Police department..... \$	11,312	169,445	147,276
Fire department..... \$	6,859	186,852	192,708
Inspection of building, plumbing, etc..... \$	128	4,800	2,071
Highways, including administration, salaries and outlays..... \$	24,355	460,090	683,460
Health and sanitation..... \$	1,138	348,589	95,041
Charities and corrections..... \$	1,650	213,520	132,109
Education..... \$	32,153	665,645	624,472
Public service enterprises..... \$	5,318	603,030	406,293
Recreations..... \$	1,391	6,831	31,896
Interest..... \$	35,335	490,798	301,516
Sinking funds..... \$	17,407	430,847	200,433
Total ordinary expenditure..... \$	150,249	3,888,209	3,281,096
Total extraordinary expenditure..... \$	98,253	730,875	315,603
<b>Grand total expenditure..... \$</b>	<b>248,502</b>	<b>4,619,084</b>	<b>3,596,699</b>
Assets—			
Available..... \$	141,505	3,535,395	2,247,271
Revenue producing..... \$	302,000	4,837,730	6,720,063
Non-revenue producing..... \$	960,174	7,842,484	3,201,713
Other..... \$	1	44,483	40,545
<b>Total assets..... \$</b>	<b>1,403,679</b>	<b>16,260,092</b>	<b>12,209,592</b>
Liabilities—			
Bonded debt..... \$	924,600	12,414,466	8,256,728
Floating or current debt..... \$	1	322,293	442,069
All other..... \$	351,438	52,353	179,086
<b>Total liabilities..... \$</b>	<b>1,276,038</b>	<b>12,789,112</b>	<b>8,877,883</b>

## Cities of 10,000 Population and over for the calendar year, 1920.

Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada, Total.
11	24	3	3	4	3	57
60,017	112,596	32,756	26,667	72,329	22,860	376,343
876,274	1,158,442	207,305	79,456	142,857	170,439	2,827,676
891,770,301	1,018,089,000	266,331,944	87,905,620	177,249,184	290,088,340	2,858,792,013
297,884,462	206,531,479	48,108,498	22,717,700	19,413,990	43,079,717	686,365,646
1	71,410,029	1	1,245,614	3,436,644	1	101,888,521
623-1	82,546,688	258-25	7,006,483	1	1	101,899,731
579-56	1,263-76	575	118-25	251-82	385-47	3,087-04
930-51	1,036-31	428-25	405-57	916-21	209-77	3,927-17
1,176-85	1,964-37	627-49	201-2	76	452-75	4,255-48
870-13	2,623-53	318-8	256-64	561-46	421-31	5,984-26
796-98	1,684-95	357-45	170-93	429-45	378-22	4,100-14
3,152-42	1,946-91	754-03	190-7	445-85	489-66	4,595-93
1,384,418	4,691-7	456,375	918-52	1,772-35	1,065-72	12,856-04
1,290,803	1,604,063	958,806	264,873	509,871	374,194	5,195,460
	5,538,775		263,698	553,660	504,299	10,343,883
22,345,511	40,742,821	7,117,371	3,941,951	8,611,210	7,845,350	94,407,640
1,117,282	1,356,741	338,296	121,536	141,434	472,210	3,653,139
298,749	733,651	49,708	25,218	30,942	236,823	1,473,773
4,595,776	11,244,432	1,833,701	2,471,715	6,242,447	1,051,258	28,511,522
1	564,596	1	25,857	1	1	1,021,940
969,850	779,674	72,374	36,866	700	399,878	2,231,655
1,370,940	12,821,276	121,341	119,544	1	353,805	14,559,240
32,658,360	84,155,827	11,338,945	7,481,231	15,259,741	10,678,573	168,840,791
15,485,378	23,708,052	674,945	341,132	100,000	266,033	41,679,649
<b>48,143,739</b>	<b>107,863,879</b>	<b>12,013,890</b>	<b>7,822,413</b>	<b>15,359,741</b>	<b>10,944,606</b>	<b>210,520,440</b>
3,481,285	3,454,272	354,905	337,737	672,164	391,921	9,009,740
2,069,558	2,618,442	421,183	197,210	441,075	679,863	6,755,364
2,245,781	3,492,423	507,652	369,793	489,066	634,445	8,125,579
47,880	237,789	28,132	12,931	28,718	21,287	383,736
5,754,543	10,486,314	516,856	369,593	843,632	1,065,217	20,204,060
1,457,789	4,785,705	443,141	341,152	294,264	354,858	8,121,677
438,339	2,597,168	507,560	247,860	324,968	386,766	4,849,940
5,606,061	15,438,961	2,609,858	1,544,805	2,715,118	2,080,085	31,317,158
3,868,840	10,330,311	1,809,259	2,419,021	6,442,030	482,521	26,366,623
267,389	2,329,100	187,158	65,257	151,483	173,929	3,214,434
8,828,532	8,688,476	966,222	1,247,798	1,293,225	2,918,611	24,770,513
1,366,615	13,301,681	397,605	484,973	316,381	1,189,377	17,705,369
36,551,915	84,328,164	9,875,916	7,750,634	14,228,229	10,829,443	170,883,855
11,559,108	23,926,540	1,230,792	385,104	1,300,188	261,942	39,808,405
<b>48,111,023</b>	<b>108,254,704</b>	<b>11,106,708</b>	<b>8,135,738</b>	<b>15,528,417</b>	<b>11,091,385</b>	<b>210,692,260</b>
36,269,604	72,814,844	22,761,651	12,592,712	27,236,695	25,252,741	202,852,418
39,022,249	70,035,502	21,949,281	11,638,388	19,238,467	12,549,783	186,296,463
84,112,018	147,665,266	36,148,537	17,232,048	31,901,040	42,141,253	371,204,533
31,399,106	11,722,380	1,783,036	1	1,499,024	3,019,310	49,507,884
<b>190,802,977</b>	<b>302,240,992</b>	<b>82,642,505</b>	<b>41,463,148</b>	<b>79,875,226</b>	<b>82,963,087</b>	<b>809,861,298</b>
159,633,996	199,959,782	51,614,069	27,255,644	55,857,590	59,471,712	575,388,587
12,286,736	7,869,211	5,953,888	2,803,105	10,122,898	7,112,653	46,912,853
10,793,090	25,471,110	6,178,211	3,134,246	2,765,626	3,252,387	52,177,547
<b>182,713,822</b>	<b>234,431,615<sup>3</sup></b>	<b>63,746,165</b>	<b>33,192,995</b>	<b>68,746,114</b>	<b>69,836,752</b>	<b>675,610,499<sup>3</sup></b>

<sup>1</sup> None. <sup>2</sup> No record. <sup>3</sup> The city of Chatham shows total liabilities only; these are included in this item.



## 30.—Receipts, ordinary and extraordinary, of Cities, for the fiscal year 1920.

No.	Name of City or Town.	Ordinary Receipts.					
		Taxation.	Licenses and fees.	Fines, forfeits and escheats.	Public services.	Sales, rentals and leases of public buildings or lands.	Grants, subventions and fees for educational purposes.
1	Prince Edward Island—	\$	\$	\$	\$	\$	\$
	Charlottetown.....	118,858	7,839	2,392	16,242	305	
	Nova Scotia—						
2	Halifax.....	837,840	32,695	45,983	164,266	2,551	19,000
3	Sydney.....	411,660	11,300	24,000	56,100	71	
4	Amherst.....	178,579	568	3,006	29,761	71	4,236
5	New Glasgow.....	131,594	13,444	2	40,479	2	7,373
6	Dartmouth.....	117,768	1,168	1,017	187,652	3,085	
	New Brunswick—						
7	St. John.....	1,431,861	35,689	11,489	518,760	21,255	1,000
8	Moncton.....	379,663	2	9,198	22,879	2	
9	Fredericton.....	195,603	2,937	1,597	36,054	1,992	
	Quebec—						
10	Montreal.....	17,934,148	909,977	236,529	2,713,490	131,139	2
11	Quebec.....	1,714,601	45,190	10,915	486,607	6,228	2
12	Verdun.....	376,457	22,820	6	179,552	2	6
13	Hull.....	177,233	16,027	41,782	137,135	2	6
14	Sherbrooke.....	284,106	39,700	3,133	410,290	230	6
15	Three Rivers.....	316,919	31,924	2	115,454	7,387	6
16	Westmount.....	713,491	18,188	2,129	300,045	8,667	6
17	Lachine.....	269,140	11,889	1,956	101,551	660	6
18	Outremont.....	402,500	4,593	295	2	43,361	6
19	St. Hyacinthe.....	85,809	11,239	750	70,008	2	6
20	Lévis.....	71,107	5,735	1,260	72,644	1,939	6
	Ontario—						
21	Toronto.....	21,237,193	1,036,481	274,855	4,038,455	510,013	247,139
22	Hamilton.....	3,433,765	133,161	65,965	1,184,035	11,116	87,228
23	Ottawa.....	3,227,240	53,403	35,912	734,790	835	2
24	London.....	1,823,685	23,776	35,487	302,310	6,559	47,738
25	Windsor.....	1,245,357	16,756	77,886	569,174	1,500	10,031
26	Brimford.....	939,483	6,369	13,714	466,946	737	2
27	Kitchener.....	563,524	3,697	7,376	459,185	150	17,962
28	Kingston.....	530,310	1,382	2	358,933	2	972
29	Sault Ste. Marie.....	648,890	6,760	64,329	230,220	4,002	14,585
30	Peterborough.....	577,082	6,451	6,493	218,150	1,767	35,022
31	Fort William.....	1,182,181	8,739	32,983	559,655	2,000	6
32	St. Catharines.....	733,621	8,653	13,181	217,988	2	2
33	Stratford.....	473,245	4,136	7,406	30,841	2	18,088
34	St. Thomas.....	514,552	2,947	6,143	637,709	9,746	2
35	Port Arthur.....	708,014	6,846	26,443	184,511	45,886	13,842
36	Sarnia.....	431,388	4,763	8,867	254,673	1,447	6
37	Niagara Falls.....	368,978	5,988	9,575	221,045	2	150
38	Chatham.....	426,116	2,936	9,874	66,838	150	973
39	Galt.....	377,381	2,737	2,790	179,711	3,287	2
40	Belleville.....	336,667	4,749	6,019	90,651	2,028	2
41	Owen Sound.....	275,757	2,695	5,398	17,518	1,035	9,961
42	Oshawa.....	193,659	3,346	14,148	59,616	289	327
43	North Bay.....	246,530	5,057	6,894	40,240	23,481	12,673
44	Woodstock.....	248,203	4,913	1,913	121,238	2	2
	Manitoba—						
45	Winnipeg.....	5,943,773	332,331	47,372	1,650,199	2	2
46	Brandon.....	662,654	2	2	150,012	2	2
47	St. Boniface.....	510,944	5,965	2,336	33,490	1,200	2
	Saskatchewan—						
48	Regina.....	1,759,281	21,305	14,546	1,093,905	9,933	6
49	Saskatoon.....	1,303,733	83,322	3,878	916,632	4,165	25,857
50	Moosejaw.....	878,937	16,909	6,794	461,178	1,418	2
	Alberta—						
51	Calgary.....	3,560,556	66,009	14,025	2,553,714	2	2
52	Edmonton.....	3,980,495	61,517	11,404	2,960,675	94,391	2
53	Lethbridge.....	501,763	6,476	3,211	355,232	3,451	2
54	Medicine Hat.....	568,396	7,432	2,302	372,826	583	2
	British Columbia—						
55	Vancouver.....	5,389,097	379,609	209,002	520,328	18,223	239,200
56	Victoria.....	1,910,019	79,829	17,287	343,399	4,195	108,868
57	New Westminster.....	546,234	12,773	10,534	187,531	14,071	51,810

<sup>1</sup>Non-revenue receipts includes interest, sinking funds, refunds and other non-revenue receipts. <sup>2</sup>None.  
<sup>3</sup>Sewers are included in waterworks. <sup>4</sup>Included in taxation. <sup>5</sup>Statistics are not available. <sup>6</sup>Under the control of the school board. <sup>7</sup>Grant paid direct to library board.

## 30.—Receipts, ordinary and extraordinary, of cities, for the fiscal year 1920.

Ordinary Receipts.					Extraordinary Receipts.			Grand total ordinary and extraordinary receipts.	No.
Libraries, museums and art galleries.	Sanitation and promotion of cleanliness.	Non-revenue receipts. <sup>1</sup>	Miscellaneous receipts.	Total ordinary receipts.	Debentures or bonds.	Other extraordinary receipts.	Total extraordinary receipts.		
\$	\$	\$	\$	\$	\$	\$	\$	\$	
2	3	2	1,845	147,481	94,522	3,731	98,253	245,734	1
2	34,011	2	1,305,083	2,422,429	2	2	2	2,422,429	2
2	7,000	2	50,060	579,120	136,000	2	136,000	715,120	3
2	3,742	45,815	85,444	346,986	5,999	10,337	16,336	363,322	4
2	4,794	21,224	26,596	242,367	29,750	2	29,750	272,117	5
2	2	665	77,830	396,558	2	2	2	396,558	6
2	553	60,874	74,010	2,155,491	495,698	2	495,698	2,651,189	7
2	4	18,167	162,992	592,899	261,511	50,000	311,511	904,410	8
2	10,513	19,930	116,157	384,783	16,510	2	16,510	401,293	9
258	130,228	2,303,360	85,826	24,444,955	7,900,000	2,056,756	9,956,756	34,401,711	10
2	59,027	6,994	6,994	2,329,562	2,129,134	2	2,129,134	4,458,696	11
2	9,161	11,042	101,890	700,922	2	56,467	56,467	757,389	12
2	3,612	7,941	635	384,365	29,900	167,602	197,502	581,867	13
2	2	20,449	720,370	1,478,278	975,479	2	975,479	2,453,757	14
2	92,006	15,762	17,020	596,472	1,390,500	79,134	1,469,634	2,066,106	15
612	8,466	5,662	128,108	1,185,368	220,159	14,882	235,041	1,420,409	16
2	2	5,536	167,903	567,635	133,440	2	133,440	701,075	17
2	4	2,423	33,284	486,456	2	193,570	193,570	680,026	18
2	2	2,829	128,501	299,136	2	21,838	21,838	320,974	19
2	2	1,540	30,986	185,211	76,480	40,038	116,518	301,729	20
2	14,299	11,364,208	2,757,104	41,479,747	7,094,203	274,992	7,369,127	48,848,874	21
2	2	1,006,010	1,956,146	7,877,426	1,382,653	8,575	1,391,228	9,268,654	22
45,730	2	311,886	159,099	4,568,895	2,237,896	2	2,237,896	6,806,791	23
2	125,684	749,323	67,986	3,134,810	839,008	5,955,865	6,794,873	9,929,683	24
2	2	6,604	2	1,965,015	892,531	2	892,531	2,857,546	25
2	4	43,851	99,232	1,580,363	80,974	64,012	144,986	1,725,349	26
2	2	1,100	2	1,035,032	2	2	2	1,035,032	27
2	2	2	113,158	1,021,745	327,500	2	327,500	1,349,245	28
2	1,818	129,332	415,456	1,497,777	586,571	67,967	654,538	2,152,315	29
2	1,249	1,964	227,365	1,057,341	613,431	112,970	726,401	1,783,742	30
2	555	2,168	951,987	2,825,057	455,497	72,397	527,894	3,352,951	31
7	2	1,981,525	1,002,685	3,959,653	125,400	76,124	201,524	4,161,177	32
2	4,793	82,437	588,042	1,190,900	106,422	2	106,422	1,297,322	33
2	1,215	7,381	37,444	1,235,225	63,740	2	63,740	1,298,965	34
2	10,344	106,942	1,416,189	2,505,175	4,699	2	4,699	2,509,874	35
2	23,293	40,346	301,771	1,080,390	535,766	57,700	593,466	1,673,856	36
2	850	2,461	621,550	1,230,447	306,614	2	306,614	1,537,061	37
2	85	906	283,835	790,740	139,302	2	139,302	930,042	38
2	2,729	26,859	25,440	618,620	204,781	2	204,781	823,401	39
2	2	59,967	423,743	925,083	41,831	131,574	173,405	1,098,488	40
7	4,836	241,621	439,307	989,160	88,455	1,005	89,460	1,078,620	41
2,130	14,815	339	348,338	647,387	329,074	25,549	354,623	1,002,010	42
2	1,740	2	47,458	348,535	54,667	12,017	66,684	415,219	43
580	2	25,910	152,393	591,304	253,672	82,686	336,358	927,662	44
1,123	17,283	2	238,278	8,230,359	600,000	2	600,000	8,830,359	45
2	2	1,433	79,717	893,816	2	2	2	893,816	46
2	2	395,092	1,265,743	2,214,770	74,945	2	74,945	2,289,715	47
2	15,754	51,843	473,842	3,440,409	240,487	2	240,487	3,680,896	48
793	8,781	50,000	146,958	2,518,262	100,000	695	100,695	2,618,957	49
818	10,638	54,587	65,424	1,522,560	2	2	2	1,522,560	50
2	2	2	2	6,194,304	2	2	2	6,194,304	51
50,377	47,807	2	6,765	7,213,431	2	2	2	7,213,431	52
1,006	2	600	2,984	874,723	2	2	2	874,723	53
2	16,682	6,285	2,777	977,283	100,000	2	100,000	1,077,283	54
2	34,963	191,339	7,978	6,989,739	2	2	2	6,989,739	55
3,240	10,662	144,937	48,993	2,671,429	2	158,053	158,053	2,829,482	56
2	2,747	32,798	158,907	1,017,405	25,000	82,980	107,980	1,125,385	57

## 31.—Expenditure, ordinary and extraordinary, of Cities, for the fiscal year 1920.

No.	Name of City or Town.	Ordinary Expenditure.					
		General Government.	Police Department.	Fire Department.	Inspection of buildings, plumbing, etc.	Highways.	Health and sanitation.
		\$	\$	\$	\$	\$	\$
1	Prince Edward Island—						
	Charlottetown.....	11,521	11,312	6,859	128	24,355	1,138
	Nova Scotia—						
2	Halifax.....	53,268	109,590	130,049	1	224,721	327,653
3	Sydney.....	25,200	41,000	30,000	4,800	120,100	7,000
4	Amherst.....	24,565	6,508	8,540	1	22,837	7,351
5	New Glasgow.....	26,299	7,057	9,169	1	61,481	3,878
6	Dartmouth.....	15,218	5,290	9,094	1	30,951	2,707
	New Brunswick—						
7	St. John.....	123,644	107,506	144,392	1	403,802	44,183
8	Moncton.....	21,423	25,460	38,181	2,071	188,790	35,822
9	Fredericton.....	16,318	14,310	10,135	1	90,868	15,036
	Quebec—						
10	Montreal.....	2,780,136	1,742,951	1,650,203	29,880	4,349,050	1,217,873
11	Quebec.....	211,064	140,351	288,286	13,996	289,474	42,482
12	Verdun.....	24,270	22,306	33,459	1,500	36,358	35,561
13	Hull.....	20,948	31,857	58,486	1	116,761	9,804
14	Sherbrooke.....	47,313	19,430	39,137	1	69,810	9,796
15	Three Rivers.....	87,889	28,334	38,541	1,000	92,431	39,050
16	Westmount.....	80,182	35,086	40,938	1	267,780	8,004
17	Lachine.....	44,520	20,995	15,299	1	82,075	24,271
18	Outremont.....	153,066	21,426	20,799	1,504	237,333	51,661
19	St. Hyacinthe.....	18,212	6,822	15,607	1	71,694	19,032
20	Levis.....	13,685	3	45,026	1	141,777	255
	Ontario—						
21	Toronto.....	1,517,428	1,609,888	1,994,883	198,078	4,988,738	2,649,609
22	Hamilton.....	720,044	249,058	253,524	13,219	641,856	415,645
23	Ottawa.....	138,954	181,710	272,317	1,800	480,357	436,634
24	London.....	114,655	103,028	145,809	4	562,817	308,440
25	Windsor.....	46,985	79,129	88,435	2,852	125,067	19,121
26	Brantford.....	114,310	58,957	76,496	1	201,581	80,132
27	Kitchener.....	17,870	11,779	58,520	300	258,277	52,509
28	Kingston.....	51,004	24,390	32,795	1	194,526	45,491
29	Sault Ste. Marie.....	46,603	43,075	48,876	1,500	94,084	35,523
30	Peterborough.....	41,077	24,544	37,889	1,271	380,182	51,051
31	Port William.....	189,364	30,474	64,960	3,036	134,380	20,797
32	St. Catharines.....	62,354	20,585	45,037	1,406	146,796	36,460
33	Stratford.....	14,383	17,079	47,612	1,537	143,210	75,945
34	St. Thomas.....	47,811	19,523	19,473	1,744	307,753	44,381
35	Port Arthur.....	74,781	27,571	69,955	2,413	79,160	40,658
36	Sarnia.....	26,345	23,930	27,390	1,500	261,047	54,102
37	Niagara Falls.....	28,559	20,728	46,787	1	280,258	70,345
38	Chatham.....	20,011	11,357	34,498	1	58,219	9,708
39	Galt.....	51,613	9,070	29,754	1	139,930	48,083
40	Belleville.....	43,474	14,666	17,705	7,133	445,893	12,235
41	Owen Sound.....	15,424	9,793	25,165	1	137,047	12,171
42	Oshawa.....	28,102	12,183	9,648	1	278,609	115,643
43	North Bay.....	19,421	9,479	16,348	1	78,320	28,330
44	Woodstock.....	23,700	6,446	29,047	1	68,207	122,686
	Manitoba—						
45	Winnipeg.....	274,079	376,011	404,015	25,634	424,082	379,570
46	Brandon.....	32,790	21,291	55,286	1,302	37,893	32,344
47	St. Boniface.....	48,036	23,881	48,351	1,196	54,881	31,227
	Saskatchewan—						
48	Regina.....	165,476	105,614	147,670	5,490	139,902	159,690
49	Saskatoon.....	99,000	50,722	122,898	6,445	94,397	107,486
50	Moosejaw.....	73,261	40,874	99,225	996	135,294	73,976
	Alberta—						
51	Calgary.....	357,346	151,772	244,894	18,556	418,303	199,590
52	Edmonton.....	199,114	247,600	162,767	8,509	347,235	33,482
53	Lethbridge.....	64,147	20,296	40,870	1,653	48,896	26,468
54	Medicine Hat.....	51,557	21,407	40,535	1	29,198	34,724
	British Columbia—						
55	Vancouver.....	270,871	544,614	432,955	12,962	761,009	192,817
56	Victoria.....	87,170	110,845	151,396	3,150	200,045	145,320
57	New Westminster.....	33,880	24,404	50,094	5,175	104,163	16,721

<sup>1</sup>None. <sup>2</sup>Under the control of the school board. <sup>3</sup>Included in fire department. <sup>4</sup>Plumbing inspection included in health department administration.

## 31.—Expenditure, ordinary and extraordinary, of Cities, for the fiscal year 1920.

Ordinary Expenditure.								No.
Charities and corrections.	Education.	Municipally owned public services.	Recreations.	Interest.	Sinking Fund.	Miscellaneous expenditure.	Total ordinary expenditure.	
\$	\$	\$	\$	\$	\$	\$	\$	
1,650	32,153	5,318	1,391	35,335	17,407	1,682	150,249	1
157,772	401,096	308,546	1	293,637	332,290	57,177	2,395,799	2
16,000	120,600	25,000	2,500	88,000	32,500	67,000	579,700	3
27,470	42,250	15,586	2,100	46,284	40,725	28,270	272,486	4
7,041	35,009	40,096	1	45,781	19,543	2,512	257,866	5
5,237	66,690	213,802	2,231	17,096	5,789	8,253	382,358	6
101,040	412,383	359,431	23,441	222,887	155,791	206,688	2,305,188	7
23,540	140,314	2,299	6,855	50,982	41,571	85,436	662,744	8
7,529	71,775	44,563	1,600	27,647	3,121	10,262	313,164	9
311,124	5,185,689	2,658,744	191,937	6,884,686	711,650	754,264	28,468,187	10
60,378	407,931	91,559	14,704	649,161	75,152	1	2,284,538	11
5,012	2	121,882	2,414	183,963	38,500	1	505,225	12
11,546	2	92,261	1,322	125,082	49,453	6,929	524,449	13
20,798	1,830	190,953	2,254	186,044	38,930	2,878	628,813	14
12,240	2	190,569	11,981	255,067	70,418	21,258	848,778	15
708	10,611	244,837	27,074	160,041	309,601	212,759	1,397,621	16
9,679	2	80,240	3,137	142,849	23,490	2,739	449,294	17
1,859	2	1	9,271	153,782	44,652	101,680	797,033	18
4,695	2	94,493	3,295	61,643	1,763	11,879	309,135	19
300	2	103,662	1	26,214	3,006	4,917	338,842	20
969,183	7,115,435	3,548,923	1,884,757	4,485,045	8,665,074	4,912,946	44,539,987	21
676,072	1,365,046	975,679	50,515	763,332	601,364	8,479	6,735,833	22
269,926	1,124,584	912,773	44,058	807,913	178,289	1	4,849,315	23
175,725	881,154	307,503	34,694	360,595	762,369	465,721	4,222,510	24
17,543	805,041	477,692	33,507	190,421	9,341	356,155	2,251,289	25
121,963	256,657	452,222	11,532	128,413	82,621	1	1,584,884	26
7,973	165,439	208,474	15,751	4,266	1	1	801,158	27
28,573	316,794	395,272	4,603	99,789	40,173	1	1,233,410	28
29,362	506,613	224,719	29,115	142,925	105,282	59,072	1,366,249	29
24,968	453,620	225,944	6,595	93,946	71,777	1,834	1,414,698	30
53,894	497,419	446,186	3,347	352,489	150,000	218,040	2,164,386	31
26,898	267,359	182,869	7,045	179,345	2,036,188	213,376	3,225,718	32
12,399	136,126	40,785	33,500	174,974	131,781	112,065	941,396	33
16,983	164,490	552,641	14,879	75,997	3,382	11,302	1,280,359	34
28,459	206,752	78,027	12,058	313,317	81,212	51,961	1,066,324	35
17,137	210,094	270,509	73,208	112,177	402	2,952	1,080,793	36
13,239	220,058	233,356	1,610	8,693	1	8,773	932,406	37
11,309	123,456	181,172	3,507	72,116	1	6,063	531,416	38
60,453	115,257	162,649	14,276	81,001	31,345	28,797	772,228	39
5,123	101,603	106,777	4,457	66,753	109,401	832	936,052	40
5,310	106,305	9,986	6,716	43,119	216,521	14,252	601,815	41
1,396	115,973	182,822	34,311	35,190	1	47,779	861,656	42
7,232	103,928	27,202	1,472	46,244	1	1,335	339,311	43
16,048	79,758	126,129	3,587	48,416	25,159	45,788	594,971	44
469,772	2,236,603	1,648,634	179,300	537,173	140,075	987,090	8,082,038	45
20,292	158,255	122,778	7,197	156,659	136,189	102,531	884,807	46
17,496	215,000	37,847	661	272,390	121,341	36,764	909,071	47
54,789	679,949	1,009,985	27,827	573,087	263,361	1	3,332,840	48
132,335	544,127	803,954	25,188	467,258	146,592	112,504	2,713,206	49
60,736	320,729	605,082	12,242	207,453	74,720	1	1,704,588	50
98,262	1,064,532	2,841,198	88,506	675,857	219,391	109,595	6,487,802	51
183,126	1,287,910	3,044,390	34,348	302,794	1	65,262	5,916,537	52
21,346	159,229	391,090	20,160	75,605	22,489	5,078	897,327	53
22,234	203,447	165,352	8,469	238,969	74,501	36,170	926,563	54
335,002	1,439,949	233,054	103,800	1,760,033	855,313	113,089	7,055,468	55
31,217	424,378	173,620	61,022	868,055	234,512	242,406	2,733,136	56
20,547	215,758	75,847	9,107	290,523	99,552	95,068	1,040,839	57



### 31.—Expenditure, ordinary and extraordinary, of Cities for the fiscal year 1920. —concluded.

No.	Name of City or Town.	Extraordinary Expenditure.					Grand Total all expen- ditures.
		Funded debt bonds.	Special deben- tures or bonds.	Revenue or tem- porary loans.	Other debt obliga- tions.	Total extra- ordinary.	
		\$	\$	\$	\$	\$	\$
1	Prince Edward Island— Charlottetown.....	1	1	1	98,253	98,253	248,502
2	Nova Scotia— Halifax.....	583,490	1	27,949	1	611,439	3,007,238
3	Sydney.....	1	1	1	1	1	579,700
4	Amherst.....	1	30,182	54,235	6,569	90,986	363,472
5	New Glasgow.....	820	1	13,430	1	14,250	272,116
6	Dartmouth.....	5,000	1	9,200	1	14,200	396,558
7	New Brunswick— St. John.....	1	7,581	1	1	7,581	2,312,769
8	Moncton.....	10,500	86,000	126,713	1	223,213	885,957
9	Fredericton.....	1	6,391	78,418	1	84,809	397,973
10	Quebec— Montreal.....	5,451,183	2	1	71,876	5,523,059	33,991,246
11	Quebec.....	2,125,000	1	641,930	1	2,766,930	5,051,468
12	Verdun.....	25,000	1	1	68,091	93,091	598,316
13	Hull.....	29,900	1	20,852	1	50,752	575,201
14	Sherbrooke.....	25,000	975,479	634,000	1	1,634,479	2,263,292
15	Three Rivers.....	745,000	326,000	117,085	29,243	1,217,328	2,066,106
16	Westmount.....	2	1	22,788	1	22,788	1,420,409
17	Lachine.....	10,000	1	204,873	500	215,373	664,667
18	Outremont.....	1	1	1	1	1	797,033
19	St. Hyacinthe.....	11,839	1	1	1	11,839	320,974
20	Levis.....	10,942	1	12,527	1	23,469	362,311
21	Ontario— Toronto.....	4,170,373	1	1,600,113	915,000	6,685,486	51,225,473
22	Hamilton.....	765,937	50,233	1,244,449	318,097	2,378,716	9,114,549
23	Ottawa.....	29,250	1	1	1	29,250	4,878,565
24	London.....	246,974	865,156	1	4,559,800	5,671,930	9,894,440
25	Windsor.....	257,034	1	1	291,720	548,754	2,800,043
26	Brantford.....	102,648	1	7,886	1	110,534	1,695,418
27	Kitchener.....	159,873	1	1	1	159,873	961,031
28	Kingston.....	22,596	50,555	93,218	166,369	332,738	1,566,148
29	Sault Ste. Marie.....	14,168	106,025	574,104	98,187	792,484	2,158,733
30	Peterborough.....	1	55,978	281,790	4,934	342,702	1,757,400
31	Fort William.....	107,659	1	1,070,000	1	1,177,659	3,342,045
32	St. Catharines.....	42,968	1	864,131	1	907,099	4,132,817
33	Stratford.....	1	1	353,000	3,161	356,161	1,297,557
34	St. Thomas.....	3	3	3	3	81,667	1,362,026
35	Port Arthur.....	36,166	50,083	1,405,155	1	1,491,404	2,557,728
36	Sarnia.....	101,400	260,103	186,421	1	547,924	1,628,717
37	Niagara Falls.....	64,230	197,810	319,683	25,816	607,539	1,539,945
38	Chatham.....	80,917	150,774	250,000	1	481,691	1,013,107
39	Galt.....	135,000	1	1	1	135,000	907,228
40	Belleville.....	3,750	1	150,000	1	153,750	1,089,802
41	Owen Sound.....	26,561	95,000	377,931	1	499,492	1,101,307
42	Oshawa.....	30,076	1	109,000	1	139,076	1,000,732
43	North Bay.....	31,251	2,077	32,800	9,780	75,908	415,219
44	Woodstock.....	1	1	142,000	77,703	219,703	814,674
45	Manitoba— Winnipeg.....	1	363,837	1	1	363,837	8,445,875
46	Brandon.....	1	1	1	1	1	884,807
47	St. Boniface.....	53,439	200,000	113,516	500,000	866,955	1,776,026
48	Saskatchewan— Regina.....	37,056	1	203,500	1	240,556	3,573,396
49	Saskatoon.....	88,000	1	1	1	88,000	2,801,206
50	Moosejaw.....	56,548	1	1	1	56,548	1,761,136
51	Alberta— Calgary.....	6,500	1,620	1	1	8,120	6,495,922
52	Edmonton.....	853,709	404,852	1	1	1,258,561	7,175,098
53	Lethbridge.....	1	1	1	1	1	897,327
54	Medicine Hat.....	4,377	29,130	1	1	33,507	960,070
55	British Columbia— Vancouver.....	1	1	1	1	1	7,055,468
56	Victoria.....	83,350	1	18,592	1	101,942	2,835,078
57	New Westminster.....	1	1	160,000	1	160,000	1,200,839

¹None.

²Included in funded debt bonds.

³Total only given.

## 32.—Assets and Liabilities of Cities for the fiscal year 1920.

No.	Name of City or Town.	Available Assets.					Total available assets.
		Cash on hand at end of year.	Sinking funds and investments.	Taxes in arrears or levied but not due.	Accounts receivable.	Saleable land and buildings.	
		\$	\$	\$	\$	\$	\$
1	Prince Edward Island—						
2	Charlottetown.....	4,248	137,257	1	1	1	141,505
3	Nova Scotia—						
4	Halifax.....	210,862	887,009	1	1	897,600	1,995,471
5	Sydney.....	760	621,294	75,000	10,000	1	707,054
6	Amherst.....	142	299,076	27,206	2,925	12,650	341,999
7	New Glasgow.....	1	184,542	194,882	1	1	379,424
8	Dartmouth.....	1	58,926	37,021	500	15,000	111,447
9	New Brunswick—						
10	St. John.....	2,494	1,487,751	137,220	1	1	1,627,465
11	Moncton.....	1	119,567	79,968	138	196,346	396,019
12	Fredericton.....	4,535	27,303	61,617	4,632	125,700	223,787
13	Quebec—						
14	Montreal.....	731,960	4,248,452	12,453,578	7,519,202	2,000,000	26,953,192
15	Quebec.....	169,735	1,071,538	992,989	145,026	1	2,379,288
16	Verdun.....	8,545	122,165	309,580	34,708	59,240	534,238
17	Hull.....	23,489	203,378	132,321	11,261	1	370,449
18	Sherbrooke.....	214,087	467,257	460,353	390,642	419,935	1,952,274
19	Three Rivers.....	11,112	469,207	313,299	39,557	1	833,175
20	Westmont.....	250	1,256,495	180,258	123,165	89,789	1,649,957
21	Lachine.....	54,875	112,249	169,803	2,544	7,100	346,571
22	Outremont.....	1	295,996	110,445	170,556	287,923	864,920
23	St. Hyacinthe.....	18,557	45,405	68,183	1,590	6,650	140,385
24	Levis.....	20,993	3,818	67,040	1	153,304	245,155
25	Ontario—						
26	Toronto.....	1,370,438	29,220,624	3,785,960	1,647,594	1,327,356	37,351,972
27	Hamilton.....	151,824	3,185,298	599,107	634,405	481,446	5,052,080
28	Ottawa.....	1,082,344	4,682,470	443,539	125,512	5,046,466	11,380,331
29	London.....	107,239	1,311,794	236,066	37,016	74,032	1,766,147
30	Windsor.....	38,280	65,285	162,453	125,367	1	391,385
31	Brantford.....	41,957	1,415,392	34,607	63,656	17,676	1,532,288
32	Kitchener.....	41,221	1	8,184	500	1	49,905
33	Kingston.....	1,483	367,567	6,157	13,110	67,000	455,317
34	Sault Ste. Marie.....	896	687,331	165,792	21,019	28,281	903,319
35	Peterborough.....	155,234	896,133	22,764	4,000	228,800	1,306,931
36	Fort William.....	9,349	2,517,137	600,414	146,547	293,419	3,566,866
37	St. Catharines.....	4,701	1,331,400	73,398	28,327	10,628	1,448,454
38	Stratford.....	228	871,899	99,337	39,188	104,000	1,114,652
39	St. Thomas.....	78,730	27,710	61,356	49,469	59,450	276,715
40	Port Arthur.....	2,720	1,544,404	625,923	10,903	138,040	2,321,990
41	Sarnia.....	655	7,771	796,375	68,474	11,984	885,259
42	Niagara Falls.....	1	1	107,183	1	1	107,183
43	Chatham.....	67,010	1	87,096	1	7,500	161,606
44	Galt.....	60	509,151	37,930	5,678	21,963	574,782
45	Belleville.....	25	524,534	58,269	586	1	583,414
46	Owen Sound.....	75,856	597,801	147,375	200,911	1	1,021,943
47	Oshawa.....	130	1	49,873	4,585	15,000	69,588
48	North Bay.....	50	1	34,457	29,710	31,318	95,535
49	Woodstock.....	9,520	342,106	5,556	1	40,000	397,182
50	Manitoba—						
51	Winnipeg.....	1	13,586,724	4,358,152	389,168	182,635	18,516,679
52	Brandon.....	55,712	1,134,182	502,557	41,142	53,604	1,787,197
53	St. Boniface.....	8,112	1,374,411	977,794	7,078	90,380	2,457,775
54	Saskatchewan—						
55	Regina.....	248,884	2,390,670	674,095	92,918	1,791,585	5,198,152
56	Saskatoon.....	105,347	1,846,791	938,100	152,323	292,755	3,335,316
57	Moosejaw.....	201,923	978,387	889,977	101,671	1,887,286 <sup>2</sup>	4,059,244
58	Alberta—						
59	Calgary.....	786,416	3,109,031	5,409,858	165,509	402,656	9,873,470
60	Edmonton.....	25,700	6,289,513	6,900,455	143,026	432,288	13,790,982
61	Lethbridge.....	151,499	893,148	387,631	54,709	369,064	1,856,051
62	Medicine Hat.....	26,443	799,379	505,658	49,820	334,892	1,716,192
63	British Columbia—						
64	Vancouver.....	208,372	10,239,891	4,042,343	343,009	1,062,945	15,896,560
65	Victoria.....	45,295	2,106,345	1,919,853	1,413,203	2,665,486	8,150,182
66	New Westminster.....	16,077	698,182	208,355	108,533	174,852	1,205,999

<sup>1</sup>None. <sup>2</sup>Including \$1,356,630 other assets not specified.

## 32.—Assets and Liabilities of Cities for the fiscal year 1920—con.

No.	Name of City or Town.	Revenue Producing Assets (Land, Buildings)			
		Water Supply System.	Electric Light and Power System.	Electric Railway System.	Markets and Weight Scales.
		\$	\$	\$	\$
1	Prince Edward Island—				
	Charlottetown.....	302,000	1	1	1
	Nova Scotia—				
2	Halifax.....	2,438,175	44,000	1	150,500
3	Sydney.....	651,715	1	1	1
4	Amherst.....	313,767	1	1	1
5	New Glasgow.....	475,000	1	1	10,000
6	Dartmouth.....	360,000	9,000	1	1
	New Brunswick—				
7	St. John.....	2,397,034	1	1	150,000
8	Moncton.....	1,399,907	3	1	1
9	Fredericton.....	243,765	1	1	1
	Quebec—				
10	Montreal.....	21,978,617	1	1	1,010,438
11	Quebec.....	5,420,107	1	1	2
12	Verdun.....	636,783	403,983	1	3,200
13	Hull.....	1,216,158	71,546	1	1
14	Sherbrooke.....	812,354	2,233,779	1	6
15	Three Rivers.....	679,176	1	1	127,886
16	Westmount.....		825,121	1	1
17	Lachine.....	599,337	218,865	1	33,200
18	Outremont.....		1	1	1
19	St. Hyacinthe.....	504,124	21,541	1	68,000
20	Levis.....	541,830	1	1	1
	Ontario—				
21	Toronto.....	16,425,782	9,577,907	2,458,921	415,608
22	Hamilton.....	4,394,658	1,101,174	1	455,190
23	Ottawa.....	4,102,805	1,122,142	1	1
24	London.....	1,650,251	932,794	1	174,000
25	Windsor.....	735,000	755,609	1	67,500
26	Brantford.....	785,733	163,443	363,069	1
27	Kitchener.....	210,518	1,097,046	8	50,000
28	Kingston.....	452,146	493,212	1	1
29	Sault Ste. Marie.....	861,526	3	1	1,500
30	Peterborough.....	757,170	360,294	1	4,000
31	Fort William.....	1,410,722	340,650	1,092,000	1
32	St. Catharines.....	994,426	310,805	1	21,900
33	Stratford.....	431,622	395,859	1	9
34	St. Thomas.....	590,000	430,640	75,000	5,000
35	Port Arthur.....	1,641,576	520,149	817,470	1
36	Sarnia.....	575,900	395,068	1	8,105
37	Niagara Falls.....	310,000	283,000	1	5,400
38	Chatham.....	150,000	304,000	1	78,500
39	Galt.....	521,143	468,512	1	20,000
40	Belleville.....	226,206	1	1	1
41	Owen Sound.....	319,782	219,887	1	2
42	Oshawa.....	429,450	1	1	10,000
43	North Bay.....	209,496	1	1	400
44	Woodstock.....	272,486	218,862	1	10,000
	Manitoba—				
45	Winnipeg.....	7,255,929	11,574,812	1	58,062
46	Brandon.....	661,975	1	444,482	16,422
47	St. Boniface.....	608,384	1	1	2,000
	Saskatchewan—				
48	Regina.....	1,764,947	1,750,504	1,428,773	237,391
49	Saskatoon.....	1,447,826	1,617,249	889,666	62,673
50	Moosejaw.....	1,518,771	788,558	1	132,030
	Alberta—				
51	Calgary.....	3,926,675	3,279,179	2,714,313	115,810
52	Edmonton.....	1,607,935	1,887,247	2,244,402	1
53	Lethbridge.....	604,982	653,280	356,010	1,257
54	Medicine Hat.....	1,206,065	482,365	1	17,532
	British Columbia—				
55	Vancouver.....	5,209,145	1	1	187,250
56	Victoria.....	3,286,358	66,800	1	184,500
57	New Westminster.....	510,537	198,242	1	82,264

<sup>1</sup>None. <sup>2</sup>Included in City Hall. <sup>3</sup>Included in Waterworks. <sup>4</sup>Under the control of the School Board.  
<sup>5</sup>Included in Police Department. <sup>6</sup>Included in Saleable Lands. <sup>7</sup>Including real estate. <sup>8</sup>Included in  
Electric Light and Power Systems. <sup>9</sup>Included in Fire Department. <sup>10</sup>\$2,738,569 depreciation equivalent  
to sinking fund reserve and depreciation reserve has been deducted. <sup>11</sup>Included in other Public Services.  
<sup>12</sup>Total only given.

## 32.—Assets and Liabilities of Cities for the fiscal year 1920.—con.

and Equipment).		Non-Revenue Producing Assets (Land, Buildings and Equipment).						No.
Other Public Service Enterprises	Total Revenue Producing Assets.	City Hall.	Police Department.	Fire Department.	Hospitals, Charities and Corrections.	Schools.	Libraries and Museums.	
\$	\$	\$	\$	\$	\$	\$	\$	
1	302,000	28,000	7,800	15,000	1	56,000	1	1
31,000	2,663,675	300,000	1	253,441	11,000	850,000	1	2
1	651,715	40,000	2	40,000	125,000	550,000	1	3
20,792	334,559	14,210	2	41,456	43,961	175,153	4,000	4
1	485,000	1	20,000	40,000	1	152,500	1	5
333,781	702,781	5,000	1,500	45,000	1	350,000	1	6
2,499,500	5,046,534	60,000	21,000	120,307	1	642,977	55,000	7
1	1,399,907	234,757	2	2	2	4	1	8
29,857	273,622	57,000	1	43,446	6,000	250,000	1	9
859,710	23,848,765	1,625,161	2,349,553	5	308,850	1	686,988	10
1	5,420,107	6,922,258	2	2	2	2	2	11
219,618	1,263,584	60,925	109,533	5	1	1	1	12
1	1,287,704	307,865	2	2	3	4	2	13
300,700	3,346,833	6	6	6	6	6	6	14
236,176	1,043,238	92,042	140,635	5	1	1	1	15
1	825,121	1,583,623	127,965	5	1	1	1	16
1	851,402	150,125	1	116,249	1	1	75,483	17
1	1	32,230	85,046	5	6	1	1	18
1	593,665	1	1	93,580	1	1	1	19
1	541,830	15,939	54,624	1	1	1	1	20
2,799,315	31,677,533	28,649,344	2	1,741,927	1	15,931,196	1,005,083	21
164,108	6,115,130	425,000	142,900	247,059	1,722,343	2,449,418	306,300	22
1	5,224,947	6	6	6	6	2,794,495	6	23
1,190,250	3,947,295	206,386	14,000	47,500	300,000	1,185,540	32,000	24
116,400	1,674,509	60,000	1	102,800	1	1,172,300	107,250	25
28,258	1,340,503	10,000	10,000	22,000	256,112	629,850	51,500	26
1	1,357,564	92,243	500	47,600	47,600	186,301	31,700	27
419,848	1,365,206	247,777	1	49,646	1	1	1	28
20,000	883,026	38,419	1	77,607	36,966	800,366	14,000	29
1	1,121,464	18,024	2	16,250	13,500	540,018	28,384	30
375,665	3,219,037	132,745	93,774	113,224	24,629	935,776	28,500	31
64,937	1,392,068	122,163	2	64,363	1	439,370	57,000	32
166,000	993,481	125,000	1	62,000	6,000	485,000	20,000	33
70,750	1,171,390	50,000	1	20,900	35,000	250,000	32,500	34
268,370	3,247,565	43,000	49,000	81,630	6,300	530,000	13,000	35
1	979,073	46,000	1	22,500	1	386,522	30,000	36
65,200	663,600	24,000	2,625	75,100	1	411,415	1,563	37
1	532,500	13,500	4,000	40,000	3,000	383,840	20,000	38
1	1,009,655	50,000	1	27,911	27,199	226,041	30,000	39
55,596	281,802	296,911	2	2	2	167,312	1	40
150,791	690,460	145,000	1	15,000	1	180,000	29,000	41
1	439,450	50,000	1	57,000	1	341,500	30,000	42
1	209,896	18,700	1	9,443	2,433	174,500	2,700	43
1	501,348	10,000	3,000	30,000	1	219,000	25,000	44
1,304,795	20,193,598	1,316,771	455,941	816,665	1,104,791	4,800,000	402,047	45
22,420	1,145,299	107,664	109,665	6	558,182	1	11,000	46
1	610,384	55,000	12,000	40,000	1	536,930	1	47
1	5,181,615	925,570	41,901	265,019	667,698	1,079,970	136,628	48
1	4,017,414	319,957	55,063	221,521	208,026	171,901	30,336	49
1	2,439,359	106,145	24,651	483,209	186,060	4	212,655	50
651,255	7,948,663 <sup>10</sup>	2,260,473	1	171,094	11	4	2	51
1,596,614	7,336,198	12	12	12	12	12	12	52
54,250	1,669,779	1	1,455	113,996	43,937	4	1	53
577,865	2,283,827	196,642	2	2	854,831	4	1	54
930,987	6,327,382	347,000	529,721	698,589	1,541,984	5,445,500	240,000	55
213,610	3,751,268	205,800	1	102,280	231,060	1,372,758	105,080	56
1,680,090	2,471,133	78,136	4,950	51,462	7,925	542,883	89,352	57



## 32.—Assets and Liabilities of Cities for the fiscal year 1920—concluded.

No.	Name of City or Town.	Non-Revenue Producing Assets (Land, Build-			
		Parks, gardens, and boulevards.	Road pavements.	Sidewalks.	Sewers.
		\$	\$	\$	\$
1	Prince Edward Island—				
	Charlottetown.....	107,705	288,169	1	159,000
2	Nova Scotia—				
3	Halifax.....	38,000	1,142,991	1	2,028,425
4	Sydney.....	2	100,000	75,000	400,000
5	Amherst.....	4,500	176,656	2	181,091
6	New Glasgow.....	20,000	250,000	25,000	114,800
7	Dartmouth.....	100,000	2	31,000	2
8	New Brunswick—				
9	St. John.....	3	3	3	496,420
10	Moncton.....	2	665,857	1	313,222
11	Fredericton.....	15,000	87,336	2	89,079
12	Quebec—				
13	Montreal.....	11,627,367	31,954,844	1	6,440,012
14	Quebec.....	4	1,168,185	1	1
15	Verdun.....	301,835	986,828	217,684	534,818
16	Hull.....	2	733,576	1	1
17	Sherbrooke.....	1	1,083,590	1	1
18	Three Rivers.....	295,525	535,193	20,204	356,917
19	Westmount.....	4	1,679,146	472,671	556,317
20	Lachine.....	224,850	704,055	172,008	403,266
21	Outremont.....	132,975	854,597	277,782	602,497
22	St. Hyacinthe.....	36,700	250,373	125,890	136,562
23	Levis.....	9,700	115,655	2	2
24	Ontario—				
25	Toronto.....	4	40,956,863	1	1
26	Hamilton.....	1,905,234	1,000,742	395,596	2,000,083
27	Ottawa.....	5	5	5	958,944
28	London.....	448,300	3	3	3
29	Windsor.....	160,400	2,042,925	290,683	912,500
30	Brantford.....	195,576	493,348	170,419	381,857
31	Kitchener.....	254,600	525,654	1	1
32	Kingston.....	2	145,091	2	2
33	Sault Ste. Marie.....	27,065	715,944	309,151	624,734
34	Peterborough.....	8,000	236,170	178,048	373,884
35	Fort William.....	76,266	2,210,439	1	1
36	St. Catharines.....	9,900	1,801,409	1	334,039
37	Stratford.....	164,500	129,000	1	1
38	St. Thomas.....	22,000	600,000	50,000	33,000
39	Port Arthur.....	107,447	1,745,445	1	1
40	Sarnia.....	30,000	2	2	2
41	Niagara Falls.....	2	432,614	299,102	404,251
42	Chatham.....	30,000	319,414	1	1
43	Galt.....	96,000	2	2	2
44	Belleville.....	103,745	890,531	1	1
45	Owen Sound.....	13,000	208,710	189,096	137,037
46	Oshawa.....	51,000	129,819	34,021	19,244
47	North Bay.....	2	142,918	109,988	243,576
48	Woodstock.....	36,000	75,000	50,000	150,000
49	Manitoba—				
50	Winnipeg.....	2,386,582	7,703,049	1,255,257	3,516,696
51	Brandon.....	166,184	1,163,239	1	7
52	St. Boniface.....	13,408	929,684	115,874	722,649
53	Saskatchewan—				
54	Regina.....	825,255	1,978,673	494,656	1,869,019
55	Saskatoon.....	683,966	737,308	507,987	1,449,426
56	Moosejaw.....	163,483	1,149,210	1	693,208
57	Alberta—				
58	Calgary.....	349,548	4,803,985	1,238,597	3,609,047
59	Edmonton.....	6	6	6	6
60	Lethbridge.....	215,924	303,924	255,229	496,089
61	Medicine Hat.....	175,930	117,194	246,013	549,415
62	British Columbia—				
63	Vancouver.....	3,463,200	8,102,479	1,072,587	3,500,817
64	Victoria.....	155,500	9,505,973	2	1
65	New Westminster.....	758,633	624,527	1	1

<sup>1</sup>Included in road pavements. <sup>2</sup>None. <sup>3</sup>Not available. <sup>4</sup>Included in City Hall. <sup>5</sup>Included in saleable lands. <sup>6</sup>Total only given. <sup>7</sup>Included in hospitals. <sup>8</sup>\$786,546 depreciation has been deducted. <sup>9</sup>\$3,806,593 depreciation has been deducted.

## 32.—Assets and Liabilities of Cities for the fiscal year 1920—concluded.

Assets and Equipment).		Other Assets.	Total Assets.	Liabilities.				No.
Other, including bridges.	Total non-revenue producing assets.			Bonded debt.	Floating or current debt.	All other liabilities.	Total liabilities.	
\$	\$	\$	\$	\$	\$	\$	\$	
298,500	960,174	2	1,403,679	924,600	2	351,438	1,276,038	1
57,800	4,681,657	2	9,340,803	7,208,516	27,949	2	7,236,465	2
25,000	1,355,000	2	2,713,769	2,368,000	125,000	40,000	2,533,000	3
	641,027	44,483	1,362,068	1,006,000	77,473	12,353	1,095,826	4
10,000	632,300	2	1,496,724	977,450	12,631	2	990,081	5
2	532,500	2	1,346,728	854,500	79,240	2	933,740	6
2	1,395,704	2	8,069,703	5,595,821	2,756	2	5,598,577	7
44,312	1,258,148	32,545	3,086,619	2,181,108	323,440	178,483	2,683,031	8
2	547,861	8,000	1,053,270	479,799	115,873	603	596,275	9
2,535,845	57,528,620	31,232,275	139,562,852	119,759,310	8,708,495	6,629,480	135,097,285	10
731,128	8,090,443	2	15,889,838	14,898,167	418,990	45,144	15,362,301	11
627,830	2,839,453	2	4,637,275	3,186,500	383,524	2	3,570,024	12
67,169	1,108,610	2	2,766,763	2,268,125	328,498	20,000	2,616,623	13
1	1,083,590	2	6,382,697	3,903,400	389,722	487,343	4,780,465	14
1,978,820	3,419,336	2	5,295,749	4,287,000	455,956	552,793	5,295,749	15
84,642	4,495,205	166,831	7,137,114	4,330,167	275,614	2,531,333	7,137,114	16
763,435	1,835,195	2	3,033,168	2,548,000	127,616	17,019	2,692,635	17
123,981	2,748,562	2	3,613,482	2,850,000	276,611	486,871	3,613,482	18
2	767,086	2	1,801,136	593,358	849,519	582	1,443,459	19
2	195,918	2	982,903	1,009,969	72,191	22,525	1,104,685	20
1	88,284,413	2	157,313,918	103,832,356	1,270,687	6,348,555	111,451,598	21
731,128	11,325,803	7,278,928	29,771,941	13,843,759	1,622,276	8,573,164	24,039,199	22
4,961,162	8,714,601	26,276	25,346,155	18,346,701	2	3,648,138	21,994,839	23
2	2,233,726	3,578,248	11,525,416	8,022,803	15,000	1,395,411	9,433,214	24
2	4,848,858	2	6,914,752	3,956,543	279,911	651,941	4,888,395	25
110,701	2,331,363	2	5,204,154	4,059,512	585,356	2	4,644,868	26
2	1,186,198	2	2,593,667	2,063,789	140,000	2	2,203,789	27
2	442,514	2	2,263,037	2,064,234	2	151,657	2,215,891	28
26,202	2,670,454	143,129	4,599,928	3,293,297	464,967	729,432	4,487,696	29
328,754	1,746,032	2	4,174,427	3,094,582	26,232	300,546	3,421,360	30
1,525,925	5,141,278	2	11,927,181	10,983,331	714,661	2	11,697,992	31
1,112,520	3,940,764	688,539	7,469,825	4,971,589	378,988	354,466	5,705,043	32
31,000	1,022,500	2	3,130,633	2,317,305	248,000	2,818	2,568,123	33
81,650	1,175,050	2	2,623,155	1,384,079	123,530	2	1,507,609	34
1,774,786	4,350,608	2	9,920,163	7,598,173	136,281	2,113,681	9,848,135	35
47,590	562,612	2	2,426,944	1,534,174	409,866	482,904	2,426,944	36
2	1,650,670	2	2,421,453	1,130,425	543,356	2	1,673,781	37
80,300	894,154	7,260	1,595,520	1,595,520	6	2	1,131,512	38
12,201	469,352	2	2,053,789	1,853,307	54,062	44,449	1,951,818	39
170,716	1,629,215	2	2,494,431	1,424,216	429,822	640,394	2,494,432	40
41,500	958,343	2	2,670,746	1,234,969	283,000	2	1,517,969	41
19,826	732,410	2	1,241,448	900,336	38,610	33,385	972,331	42
3,301	707,559	2	1,012,990	788,273	104,606	169	893,048	43
48,789	646,789	2	1,545,319	1,262,029	2	2	1,262,029	44
5,693,666	29,451,465	1,783,036	69,944,778	43,514,929	4,211,421	5,848,838	53,575,188	45
24,862	2,140,796	2	5,073,292	3,549,246	111,034	329,373	3,989,653	46
2,130,731	4,556,276	2	7,624,435	4,549,894	1,631,433	2	6,181,327	47
2	8,284,389	2	18,664,156	12,230,225	635,562	710,097	13,575,884	48
1,672,517	6,058,008	2	13,410,738	8,932,518	1,189,174	2,415,337	12,537,029	49
657,576	2,889,651	2	9,388,254	6,092,901	978,369	8,812	7,080,082	50
2,410,071	11,036,222	2	28,858,355	22,856,162	3,242,724	852,300	26,951,186	51
437,004	16,306,419	1,281,330	38,714,929	24,687,606	5,829,010	1,849,540	32,366,156	52
550,816	1,867,558	2	5,393,388	3,909,694	767,645	63,786	4,741,125	53
2,165,326	2,690,841	217,694	6,908,554	4,404,128	283,519	2	4,687,647	54
72,400	27,107,203	300,193	49,631,338	35,327,647	5,361,950	2	40,689,597	55
1,125,331	11,750,851	2,719,117	26,371,418	18,305,572	1,482,507	3,000,516	22,788,595	56
	3,283,199	2	6,960,331	5,838,493	268,196	251,871	6,358,560	57

**Building Permits.**—Table 33 shows the value of the building permits issued by 35 cities for each of the years 1918, 1919, 1920 and 1921. For the year 1921 the total value of the building permits in the table was \$94,508,164, as compared with \$100,679,839 in 1920, a decrease of \$6,171,675.

**33.—Values of Building Permits taken out in 35 cities in 1918, 1919, 1920 and 1921.**

City.	1918.	1919.	1920.	1921.	Increase or Decrease, 1920-1921.
	\$	\$	\$	\$	\$
Nova Scotia—					
Halifax.....	2,866,852	5,194,805	3,421,379	2,199,398	— 1,221,981
Sydney.....	428,783	703,531	886,937	556,813	— 330,125
New Brunswick—					
Moncton.....	147,425	2,132,176	1,201,673	699,520	— 502,153
St. John.....	351,323	542,540	1,035,300	574,500	— 460,800
Quebec—					
Montreal—Maisonneuve.....	4,882,873	10,033,901	14,067,609	21,291,273	+ 7,223,664
Quebec.....	904,375	2,134,219	2,301,480	3,695,397	+ 1,393,917
Sherbrooke.....	150,920	873,150	3,265,538	753,900	— 2,511,638
Three Rivers.....	638,975	1,242,450	845,075	1,286,740	+ 440,765
Westmount.....	275,211	883,131	1,179,890	1,576,293	+ 396,403
Ontario—					
Brantford.....	761,500	1,173,580	798,073	404,445	— 393,628
Fort William.....	535,615	627,930	1,045,160	893,050	— 152,110
Guelph.....	83,044	603,259	494,158	433,257	— 60,901
Hamilton.....	2,472,254	5,087,462	4,340,220	4,639,450	+ 299,230
Kingston.....	318,943	657,679	494,736	591,515	+ 96,779
Kitchener.....	226,062	1,176,962	1,277,595	932,050	— 345,545
London.....	877,660	2,455,170	2,146,305	2,527,510	+ 381,205
Ottawa.....	2,635,612	3,252,322	3,305,172	2,716,409	— 588,763
Peterborough.....	241,251	196,368	939,700	541,754	— 397,946
Port Arthur.....	610,527	1,708,845	216,350	113,509	— 102,841
Stratford.....	89,786	278,888	440,782	276,089	— 164,693
St. Catharines.....	465,727	861,636	830,632	776,360	— 54,272
St. Thomas.....	53,395	285,525	258,821	113,640	— 145,181
Toronto.....	8,535,331	19,617,838	25,737,063	23,878,246	— 1,858,817
Windsor.....	570,305	2,601,370	4,850,310	5,123,110	+ 272,800
Manitoba—					
Brandon.....	90,022	98,541	412,829	749,190	+ 336,361
Winnipeg.....	2,050,650	2,948,000	8,370,150	5,580,400	— 2,789,750
Saskatchewan—					
Moosejaw.....	566,575	590,895	1,533,095	500,177	— 1,032,918
Regina.....	1,006,000	1,699,020	2,597,920	2,160,038	— 437,882
Saskatoon.....	604,715	1,404,590	1,150,585	774,466	— 376,119
Alberta—					
Calgary.....	1,196,800	2,212,000	2,906,100	2,298,800	— 607,300
Edmonton.....	351,470	931,346	3,231,955	1,563,696	— 1,668,259
British Columbia—					
New Westminster.....	108,300	166,282	319,109	264,870	— 54,239
Vancouver.....	1,450,229	2,271,411	3,569,666	3,045,132	— 524,534
Victoria.....	289,760	466,591	1,207,572	977,167	— 230,405
<b>Total, 35 Cities.....</b>	<b>36,838,270</b>	<b>77,113,413</b>	<b>100,679,839</b>	<b>94,508,164</b>	<b>— 6,171,675</b>

#### The Hydro-Electric Power Commission of Ontario.

The Hydro-electric scheme in Ontario had its beginning in 1903, when seven municipalities united in an investigation of the transmission possibilities of Niagara power. The Ontario Power Commission, which was created to report on the question, favoured the construction of a generating plant at Niagara Falls and the Hydro-Electric Power Commission of Ontario was formed in 1906 to carry out its recommendations.

The capital required by the Commission for its transmission plant was provided by issues of bonds guaranteed by the Government of Ontario, whose security was something more corporate than that of

the associated municipalities. The contracts between the Commission and the municipalities called for repayment to the Government in thirty years.

When a municipality wishes to become part of the Hydro system an engineer of the Commission reports on the cost of connection with the existing transmission lines. Then the question of joining the Hydro is voted upon under a civic by-law, which, if passed, is followed by another giving the necessary money. The local distribution system is financed by an issue of municipal debenture bonds to be retired in twenty years. Monthly bills are sent by the Commission to the municipalities, based upon an approximation to the yearly expense incurred in supplying power to the municipality, and at the year's end a thirteenth statement is sent which brings the approximation to a true account. Like any efficient business concern, the Commission makes provision from the charges for power for sinking funds, repairs and replacements.

The Commission had been given authority to generate its own power, but chose rather to contract for power from the Ontario Power Company at \$9.40 for the first 25,000 h.p. and \$9.00 for any in addition up to 100,000 h.p. In 1916 power was purchased from the Canadian Niagara Power Company as well, and in the following year the Ontario Power Company was acquired through purchase of practically all the stock. It was at this time that the Queenston-Chippawa development was begun. Of the total drop of 327 feet between Lake Erie and Lake Ontario, the Ontario Power Company used only 180 feet at Niagara Falls; the Queenston-Chippawa development takes water through a power canal from the Welland river a distance of  $12\frac{1}{2}$  miles to Queenston, where the generating plant operates under a net head of 305 feet. Thus for the same diversion of water the Queenston-Chippawa development generates 29.4 h.p. to every 14.6 h.p. generated by the Ontario Power Company.

The Queenston-Chippawa development was begun in 1917 as a war measure when the consumption of power in munition factories was greatest, at a time when the duration of the war could not be foreseen. High wage costs and high prices of material placed construction costs far above the original estimate of \$10,500,000, besides which the ultimate capacity of the plant was enlarged. The cost of completing the first five units totalling 275,000 h.p. is now estimated at approximately \$60,000,000.

The growth of the Hydro system in Ontario is shown in the amount of power used by its customers. In 1910, the Commission supplied 750 h.p. to 10 municipalities; in 1915, 100,242 h.p. to 99 municipalities; in December 1921, 242,349 h.p. was distributed, 81.7 p.c. of which was supplied to the Niagara district. "The government electric utilities in Ontario have grown from a league of seven municipalities formed in 1903 until now the vested interests of the people in this class of property are represented by investments totalling nearly \$200,000,000, the bonded indebtedness of which is guaranteed by the Province of Ontario".



**Hydro-Electric Power Statistics.**—The Canada Year Book of 1910 (p. xliii) described the installation on October 11, 1910, at Berlin, now Kitchener, Ontario, of electrical energy generated by the Niagara Falls, and the initial work carried out by the Ontario Hydro-Electric Power Commission for the supply of electrically generated power to 15 municipalities. Table 34 gives for 1920 the financial statistics of the electrical installations of 184 municipalities. It shows that the cost of operations for the year 1920 was \$8,094,057, and that the revenue was \$9,707,901, leaving a surplus of \$1,613,844, less a depreciation charge of \$902,029, making the net surplus to be \$711,815. The total number of consumers in the 184 municipalities for 1920 was 245,666 as against 216,086 in 1919, 170,916 in 1917 and 148,732 in 1916. Of the total in 1920, 199,094 were domestic light consumers, 37,173 were commercial light consumers, and 7,173 were power consumers, while 2,236 were rural consumers. The total horsepower taken in December, 1920, was 208,232 for 184 municipalities, as compared with 185,355 for 181 municipalities in December 1919, 157,048 for 143 municipalities in December, 1917, and 120,768, for 128 municipalities in December, 1916. Table 35 is a detailed statement of the assets and liabilities of the municipalities served by the Commission for the four years 1917 to 1920. The total assets have grown from \$24,427,276 in 1917 to \$34,615,361 in 1920.

**34.—Statement of Earnings and Operating Expenses of Electric Departments of Municipalities served by the Ontario Hydro-Electric Commission for the calendar years 1917-1920.**

Items.	1917.	1918.	1919.	1920.
Number of Municipalities.....	143	166	181	184
Earnings—	\$	\$	\$	\$
Domestic Light.....	1,417,460	1,632,272	1,991,632	2,546,345
Commercial Light.....	899,024	968,399	1,175,144	1,512,855
Power.....	2,665,281	3,417,248	3,443,107	3,752,188
Power, Municipal.....	—	—	—	532,279
Street Light.....	967,495	902,876	98,9018	1,005,535
Rural.....	—	—	—	168,920
Miscellaneous.....	120,805	161,244	228,271	189,779
<b>Total Earnings.....</b>	<b>6,070,965</b>	<b>7,082,039</b>	<b>7,827,055</b>	<b>9,707,901</b>
Expenses—				
Power purchased.....	2,563,880	2,807,769	3,284,491	4,216,668
Sub-Station Operation.....	203,091	238,257	217,639	285,407
Maintenance.....	42,129	60,806	81,854	102,051
Dist. System, Operation and Maintenance.....	169,326	223,348	286,311	344,552
Line Transformers Maintenance.....	25,329	30,489	42,509	46,323
Meter.....	44,462	63,155	78,727	123,701
Consumers' Premises—Expenses.....	61,765	65,150	84,301	116,284
Street Light System, Operation and Maintenance.....	157,858	196,157	215,964	236,931
Promotion of Business.....	73,516	64,963	74,789	78,295
Billing and Collecting.....	188,084	208,661	236,505	295,943
Gen'l Office, Salaries and Expenses.....	349,932	421,680	452,131	559,695
Undistributed Expenses.....	79,462	106,229	186,686	250,317
Interest and Debenture Payments.....	1,085,181	1,238,426	1,285,571	1,431,807
Miscellaneous Expenses.....	33,476	11,245	4,004	6,083
<b>Total Expenses.....</b>	<b>5,077,491</b>	<b>5,736,335</b>	<b>6,531,482</b>	<b>8,094,057</b>
Surplus.....	992,574	1,345,704	1,295,573	1,613,844
Depreciation Charge.....	607,206	718,162	814,219	902,029
Surplus less Depreciation Charge.....	385,368	627,542	481,354	711,815

**35.—Statement of Assets and Liabilities of Electric Departments of Municipalities served by the Ontario Hydro-Electric Commission for the calendar years 1917-20.**

Items.	1917.	1918.	1919.	1920.
Number of Municipalities.....	143	166	181	184
<b>Assets—Plant—</b>				
Lands and Buildings.....	\$ 1,546,241	\$ 1,859,889	\$ 1,995,546	\$ 2,175,568
Sub-Station Equipment.....	2,471,294	2,820,489	2,915,125	3,231,051
Distribution System, Overhead.....	6,080,073	6,627,237	7,445,820	8,579,882
Underground.....	1,157,060	1,216,288	1,206,297	1,313,369
Line Transformers.....	1,483,839	1,772,691	2,073,113	2,560,582
Meters.....	1,999,095	2,238,144	2,557,566	3,053,135
Street Light Equipment, Regular.....	1,237,735	1,200,626	1,206,639	1,269,007
Ornamental.....	361,976	531,503	546,498	557,678
Miscellaneous Construction Expenses.....	2,184,016	2,395,096	2,530,101	2,897,636
Steam and Hydraulic Plant.....	896,753	214,576	986,201	757,195
Old Plant.....	649,853	1,476,413	805,960	864,298
<b>Total Plant.....</b>	<b>29,077,935</b>	<b>22,352,952</b>	<b>24,298,866</b>	<b>27,059,461</b>
<b>Other Assets—</b>				
Bank and Cash Balance.....	340,027	391,195	462,437	943,858
Securities and Investments.....	—	—	627,076	341,856
Accounts Receivable.....	1,235,097	1,124,018	1,356,565	1,447,586
Inventories.....	1,261,398	972,997	1,032,570	1,400,672
Sinking Fund on Local Debentures.....	1,337,579	1,663,298	1,925,456	2,244,004
Equity in Hydro System.....	—	—	344,411	531,300
Equity in Rural Lines.....	—	—	24,661	46,284
Other Assets.....	125,240	444,788	86,216	23,447
H. E. P. C. Operating Account.....	—	—	564,602	574,953
Deficit.....	—	—	186,836	—
<b>Total Plant and Other Assets.....</b>	<b>24,427,276</b>	<b>26,949,248</b>	<b>30,909,696</b>	<b>34,615,361</b>
<b>Liabilities—</b>				
Debenture Balance.....	15,593,774	17,209,218	18,133,462	19,268,072
Accounts Payable.....	1,537,669	1,007,728	1,137,705	1,430,674
Bank Overdraft.....	886,178	576,816	403,235	514,672
Other Liabilities.....	429,104	350,013	670,272	642,294
H.E.P.C. Operating Account.....	—	—	283,222	409,463
<b>Total Liabilities.....</b>	<b>18,446,725</b>	<b>19,143,775</b>	<b>20,627,896</b>	<b>22,265,175</b>
<b>Reserves—</b>				
Debentures Paid.....	694,798	920,077	1,328,658	1,440,157
Sinking Fund Reserve.....	1,340,615	1,662,603	1,754,020	2,246,474
Reserve for Equity in Hydro System.....	—	—	344,411	531,300
Reserve for Equity in Rural Lines.....	—	—	29,461	46,284
Depreciation Reserve.....	2,463,724	3,133,550	3,750,162	4,788,645
<b>Total Reserves.....</b>	<b>4,499,137</b>	<b>5,716,230</b>	<b>7,206,712</b>	<b>9,052,860</b>
Surplus.....	1,481,414	2,089,243	3,075,088	3,297,326
<b>Total.....</b>	<b>24,427,276</b>	<b>26,949,248</b>	<b>30,909,696</b>	<b>34,615,361</b>
<b>Percentage of Net Debt to Total Assets.....</b>	<b>75.5</b>	<b>71.0</b>	<b>67.1</b>	<b>65.3</b>

## CURRENCY AND BANKING.

During the French period in Canada the currency of the country was in an extremely unsatisfactory condition—a condition mitigated by the fact that most transactions were carried on by means of barter. Beaver and other furs, tobacco and wheat were at times used as substitutes for currency, the last named being at one time a legal tender. Perhaps still less satisfactory to its holders was the use of playing cards, stamped with a value and signed by the Intendant, as paper money. Other paper money was also issued and the total amount of Canadian paper money outstanding at the time of the session was estimated at 80,000,000 livres, the great bulk of which was finally lost to its holders. In order to establish a more stable

currency the new government imported and paid out large quantities of Spanish milled dollars at 4s. 6d. per dollar, or \$4.44 4-9 per pound sterling, constituting the old par of exchange until lately used by Canadian banks as a basis of calculating sterling exchange. During the war of 1812 the British Government established an Army Bill Office authorized to issue bills of various denominations which were duly redeemed on presentation. These familiarized the Canadians with a sound paper currency, and their withdrawal after the war left a gap which was filled up later by bank note issues.

From the time of the cession, Canadians had been familiar with the dollar; now they came more and more closely into touch in their trade relations with the United States. The result of their familiarity with the decimal currency was that in 1853 a measure was passed providing for the adoption of the decimal currency with a dollar equivalent to the American dollar; the British sovereign was made legal tender at \$4.86 $\frac{2}{3}$ . An act of 1857 requiring all government accounts to be kept in dollars and cents came into force on Jan. 1, 1858, from which dates the formal adoption of decimal currency in the province of Canada.

By the Uniform Currency Act of 1871 (34 Vict., c. 4), the decimal currency was extended throughout the Dominion, the British sovereign was made legal tender for \$4.86 $\frac{2}{3}$  and the United States eagle made legal tender for \$10, while authority was taken to coin a Canadian \$5 gold piece. No Canadian gold coinage was, however, issued prior to the establishment of the Canadian branch of the Royal Mint in 1908, the first coins then struck being sovereigns similar to those of Great Britain, but with a small "C" identifying them as having been coined in Canada. In May 1912 the first Canadian \$10 and \$5 gold pieces were struck, but the Canadian gold coinage has so far been limited in amount, since Canadians have generally preferred Dominion notes to gold, for use within the country, and when gold is needed for export, British or American gold coin or bullion serve the purpose equally well.

**Gold.**—Gold is used only to an insignificant extent as a circulating medium in Canada, its monetary use being practically confined to reserves, but 5 dollar and 10 dollar gold pieces weighing respectively 129 and 258 grains, 9-10 pure gold by weight, have been coined the Canadian gold dollar thus containing 23.22 grains of pure gold. These coins were first issued in 1912, authority to issue them having been first conferred in 1910. By the Currency Act, 1910 (9-11 Edw. VII, c. 14), British sovereigns which are legal tender for \$4.86 $\frac{2}{3}$  and other gold coins, and the 5 dollar, 10 dollar and 20 dollar gold coins of the United States, which contain the same weight of gold as Canadian gold coins of these denominations, are also legal tender. These, however, are almost entirely divided between the Dominion Government and the banks as reserves, and the chief circulating medium of the country is provided by paper and token currency. The gold coinages of the Ottawa branch of the Royal Mint, which was opened on January 2, 1908, are given in Tables 36 and 37. Tab

38, compiled by the Dominion Comptroller of Currency, gives the form in which the gold has been held by the Government in recent years. The American gold, it will be seen, greatly preponderates, and there is a considerable additional amount held by the banks, as it is legal tender in both countries.

**Token Currency.**—Canadian silver dollars weighing 360 grains, 37-40 fine, are provided for by the Currency Act of 1910, but no dollar coins have ever been struck by the Mint. Fifty, twenty-five, ten and five-cent pieces of weight proportionate to their respective fractions of the dollar, and of the same fineness, are in circulation, but by chapter 9 of the Statutes of 1920 the standard of fineness was reduced to 8-10. In 1921 the coinage of a nickel five-cent piece weighing 70 grains was authorized and a number of these coins have appeared. Silver coins are legal tender only up to ten dollars, and bronze coins to twenty-five cents.

**Dominion Notes.**—An important part of the Canadian monetary system is the paper currency of the Dominion Government. Under the Dominion Notes Act, 1914 (5 Geo. V, c. 4), the Dominion Government is authorized to issue notes up to and including \$50,000,000 against a reserve in gold equal to one-quarter of that amount. By Chapter 4, Acts of 1915 "An Act respecting the issue of Dominion Notes" the Dominion Government is authorized to issue notes up to \$26,000,000 without any reserve of gold, \$16,000,000 of the notes to be against certain specified Canadian railway securities guaranteed by the Dominion Government.<sup>1</sup> Notes may be issued to any additional amount in excess of \$76,000,000, but (except as provided by the Finance Act, 1914), an amount of gold equal to the excess must be held. Thus Dominion notes are under normal conditions gold certificates. Under the Act, the Government issues notes of the denominations of 25 cents, \$1, \$2, \$4, \$5, \$50, \$100, \$500, \$1,000. In addition, "special" notes of the denominations of \$500, \$1,000, \$5,000 and \$50,000 (first issue September, 1918), are issued for use between

<sup>1</sup>The following is an outline of Canadian legislation respecting the issue of notes. After Confederation, by an Act of 1868 (31 Vict., c. 46), authority was given for the issue of notes to the extent of eight million dollars. The reserve was fixed at 20 p.c. up to a circulation of five millions; beyond that, 25 p.c. to be held as reserve. The law of 1870 (33 Vict., c. 10), authorized a limit of nine million dollars. The reserve was fixed at 20 p.c., but the nine millions were only to be issued when the specie amounted to two millions. Dollar for dollar was to be held beyond nine millions. In 1872 (35 Vict., c. 7), the reserve for the excess over nine millions was fixed at 35 p.c. in specie. This was amended in 1875 (38 Vict., c. 5), by requiring dollar for dollar beyond twelve millions; for the reserve between nine and twelve millions 50 p.c. in specie was to be held. In 1878 the law respecting Dominion notes was extended to the provinces of Prince Edward Island, British Columbia, and Manitoba. In 1880 (43 Vict., c. 13), the basis of the present standard was established. A reserve of 25 p.c. in gold and guaranteed debentures was required, of which 15 p.c. at least must be in gold. The limit was raised to twenty million dollars. In 1894 (57-58 Vict., c. 21), the limit was raised to twenty-five millions, but this was found unworkable and was repealed in 1895 (58-59 Vict., c. 16), and authority was given to issue notes to any amount over twenty millions, holding dollar for dollar beyond that sum. In 1903 (3 Edw. VII, c. 43), the Minister of Finance was required to hold gold and guaranteed debentures of not less than 25 p.c. on Dominion notes issued and outstanding up to thirty million dollars; beyond thirty millions was required to hold gold equal to the excess. In 1914 (5 Geo. V, c. 4), this amount was raised to fifty millions and in 1915, to seventy-six millions, under the conditions stated in the text. The Finance Act, 1914 (5 Geo. V, c. 3), makes provision, in case of war, panic, &c., for the issue of Dominion notes against approved securities.



banks only, the purpose being to safeguard against theft. Table 11 shows how the different denominations have run during the past six years in the circulation. Table 40 gives the main statistics of Dominion note circulation and the reserve on which it has been built since 1890.

**Bank Notes.**—The circulating medium chiefly in use in Canada is in the form of bank notes. Under the Canadian Bank Act, the banks are authorized to issue notes of the denominations of \$5 and multiples thereof to the amount of their paid-up capital. These notes are not in normal times legal tender. In case of insolvency the notes of a bank are a first lien upon the assets. They are further secured, in case of insolvency, by the Bank Circulation Redemption Fund, to which all banks contribute on the basis of 5 p.c. of their average circulation, the sum thus secured being available for the redemption of the notes of failed banks. In addition, during the period of the movement of the crops (September 1 to February 28-29), the banks may issue "excess" circulation to the amount of 15 p.c. of their combined capital and "rest or reserve" funds. In the event of war or panic the Government may permit the "excess" to run all the year. The banks pay interest on the excess at 5 p.c. If a bank desires to exceed its circulation it may, under the last revised Bank Act of 1913, do so by depositing dollar for dollar in gold or Dominion notes in a central gold reserve. The figures of bank note circulation are given in Table 42. Table 43 brings together the results obtained above as to the quantity of the circulating medium in the hands of the Canadian public.

**36.—Coinage at the Ottawa Branch of the Royal Mint in the calendar years 1919-21.**

Description of Coins.	1919.		1920.		1921.	
	Struck.	Issued.	Struck.	Issued.	Struck.	Issued.
Gold Sovereigns.....	135,889	171,042	-	4	-	136
	or	or	or	or	or	or
	\$661,326 47	\$832,404 40	-	\$19 47	-	\$661 87
Gold—	\$	\$	\$	\$	\$	\$
Canadian \$5's.....	-	-	-	-	-	-
\$10's.....	-	-	-	-	-	-
Silver.....	3,195,878 15	3,258,044 10	1,928,690 85	1,356,000 00	603,081 80	128,000 00
Bronze.....	112,013 47	115,100 00	223,737 79	209,085 00	75,559 64	60,700 00

In addition to the above coinages, the following were executed for the Governments of Newfoundland and Jamaica:—

	1917.	1918.	1919.	1920.
<b>Newfoundland</b> —Silver.....	\$240,000	\$245,000	\$200,000	-
Bronze.....	\$7,000	-	\$3,000	\$3,000
	£	s. d.	£	s. d.
<b>Jamaica</b> —Cupro-nickel.....	- 1,515 9 7½	2,061 14 1	-	-

## 37.—Gold Coinages of the Ottawa Branch of the Royal Mint, 1908-1921.

Year.	Gold.			Year.	Gold.		
	Sovereigns.		Canadian Currency. <sup>1</sup>		Sovereigns.		Canadian Currency. <sup>1</sup>
	£	\$			£	\$	
1908.....	636	3,095 20	—	1915.....	—	—	—
1909.....	16,273	79,195 27	—	1916.....	6,111	29,740 20	—
1910.....	28,012	136,325 07	—	1917.....	58,845	286,379 00	—
1911.....	256,946	1,250,470 53	—	1918.....	106,516	518,377 87	—
1912.....	—	—	1,477,710	1919.....	135,889	661,326 47	—
1913.....	3,715	18,079 67	1,890,620	1920.....	—	—	—
1914.....	14,891	72,469 53	1,499,575	1921.....	—	—	—

<sup>1</sup>Authority to issue Canadian gold coins was first conferred in 1910.

## 38.—Canadian Gold Reserves, December 31, 1905-21.

Year.	British Coin.	American Coin.	Canadian Coin.	Bullion.
	\$	\$	\$	\$
1905.....	3,990,717 00	29,494,298	—	—
1906.....	7,375,857 00	31,040,149	—	—
1907.....	5,366,478 00	33,529,889	—	—
1908.....	6,261,715 00	54,909,076	—	—
1909.....	6,537,227 00	62,988,474	—	—
1910.....	6,304,524 30	63,261,279	—	—
1911.....	6,900,094 86	93,507,764	—	222,933 99
1912.....	4,554,691 31	98,648,736	—	222,933 99
1913.....	6,391,374 52	106,642,969	650,185	222,933 99
1914.....	4,482,524 44	86,382,620	2,118,210	222,933 99
1915.....	29,606,990 36	86,516,595	3,440,150	320,344 71
1916.....	29,333,111 40	86,034,920	3,436,095	775,201 36
1917.....	27,476,789 52	77,899,494	3,426,760	803,002 29
1918.....	27,362,254 93	75,785,665	3,413,465	11,352,856 02
1919.....	27,661,192 36	60,988,110	3,411,465	14,701,439 33
1920.....	26,728,016 34	35,896,485	3,408,310	27,154,222 32
1921.....	26,729,500 65	35,896,305	3,387,125	35,090,343 77
			3,385,690	18,558,557 18

## 39.—Circulation in Canada of Silver and Bronze Coin, December 31, 1901-21.

Year.	Net Amount of Silver Coin Issued.		Amount per Head.		Net Amount of Bronze Coin Issued.		Amount per Head.	
	A. During the Year.	B. Since 1858.	Col. A.	Col. B.	C. During the Year.	D. Since 1858.	Col. C.	Col. D.
	\$	\$	cts.	\$	\$	\$	cts.	cts.
1901.....	420,000	8,279,924	7-8	1-53	41,000	676,429	0-8	11-0
1902.....	774,000	9,053,924	14-0	1-64	30,000	706,429	0-5	12-8
1903.....	633,850	9,687,774	11-1	1-70	40,000	746,429	0-7	13-1
1904.....	350,000	10,037,774	5-9	1-71	25,000	771,429	0-4	13-1
1905.....	450,000	10,487,774	7-4	1-72	20,000	791,429	0-3	13-0
1906.....	807,461	11,295,235	12-8	1-79	41,000	832,429	0-6	13-2
1907.....	1,194,000	12,489,235	17-9	1-88	32,000	864,429	0-5	13-0
1908.....	38,541	12,527,776	0-6	1-80	21,604	886,033	0-3	12-8
1909.....	648,700	13,176,476	9-0	1-83	39,300	925,333	0-5	12-9
1910.....	1,151,186	14,327,662	15-4	1-91	42,020	967,353	0-6	12-9
1911.....	1,843,001	15,670,663	18-6	2-18	54,275	1,021,628	0-8	14-2
1912.....	1,303,237	16,973,900	17-7	2-30	49,977	1,071,605	0-7	14-5
1913.....	927,131	17,901,031	12-3	2-38	55,572	1,127,177	0-7	15-0
1914.....	626,198	18,527,229	8-1	2-41	35,057	1,162,234	0-4	15-1
1915.....	61,344	18,588,573	0-8	2-36	50,354	1,212,588	0-6	15-4
1916.....	1,179,516	19,768,089	14-7	2-46	110,646	1,323,234	1-4	16-5
1917.....	1,790,941	21,559,030	21-9	2-64	116,800	1,440,034	1-4	17-6
1918.....	2,329,091	23,888,121	28-0	2-87	131,777	1,571,811	1-6	18-9
1919.....	3,196,027	27,084,148	37-7	3-19	115,011	1,686,822	1-4	19-9
1920.....	1,300,702	28,384,850	15-1	3-29	208,961	1,895,783	2-4	22-0
1921.....	40,191	28,344,659	0-5	3-23	60,543	1,956,326	0-7	22-3

## 40.—Dominion Notes Circulation and Reserves at June 30, 1890-1921.

Year ended June 30.	Notes in Circulation.					Total Specie and Guaranteed Debentures.	Circulation uncovered by Specie.	Percentage Reserve to Circulation.
	Notes 1, 2, 4 and 5, and fractional.	Large notes 50, 100, 500, 1000, 5000.		Total.				
		\$	\$	Amount.	Per capita.			
1890		8,691,950	15,357,892	3.20	65.3	3,285,515	10,125,711	34
1891	6,665,942	9,407,650	16,176,316	3.34	68.2	3,777,027	10,452,623	35
1892	6,768,666	10,354,650	17,282,698	3.53	72.0	4,921,577	10,414,455	40
1893	6,898,348	11,331,743	18,448,493	3.73	76.1	6,449,548	10,452,479	45
1894	7,136,743	13,011,750	20,061,718	4.09	83.5	8,292,405	9,892,647	51
1895	6,967,818	13,003,900	19,520,231	3.87	79.0	7,761,084	9,812,481	49
1896	7,059,331	12,480,900	20,372,196	4.00	81.6	8,758,235	9,707,950	52
1897	7,377,006	12,905,900	22,318,095	4.34	88.6	10,720,649	9,660,780	56
1898	7,819,845	14,708,750	22,318,095	4.26	86.9	10,813,739	9,417,788	57
1899	8,157,243	14,020,950	22,318,095	4.60	93.0	13,061,775	9,225,024	55
1900	8,770,165	15,406,300	24,236,485	4.90	100.0	12,476,044	11,672,213	55
1901	9,640,473	16,454,450	26,094,923	5.19	105.9	14,557,074	11,394,769	59
1902	10,161,809	17,736,700	27,898,509	5.92	120.8	18,001,639	11,932,080	63
1903	11,029,985	21,750,400	39,700,358	6.87	140.2	23,930,594	11,128,938	67
1904	12,173,248	26,832,950	32,086,198	7.13	145.5	23,422,625	16,305,492	61
1905	13,851,893	28,992,950	47,374,753	7.89	165.1	29,013,931	18,062,929	66
1906	13,045,820	34,288,400	47,334,220	8.09	168.7	34,989,270	16,305,492	61
1907	15,039,131	35,307,850	49,941,426	9.25	185.1	39,161,184	16,305,492	61
1908	15,279,675	42,377,450	58,316,531	9.25	185.1	55,363,266	18,062,929	66
1909	15,860,149	63,143,150	63,058,125	9.71	198.2	66,005,231	21,930,275	72
1910	17,871,477	71,414,250	79,005,209	11.80	240.8	78,005,231	20,929,940	75
1911	19,840,695	88,948,250	89,285,797	12.90	263.3	78,005,231	21,303,714	82
1912	22,982,588	88,948,250	111,932,238	13.78	281.2	92,442,098	19,490,140	88
1913	28,845,737	87,517,800	116,363,597	15.45	310.0	94,943,499	21,420,038	81
1914	24,586,448	89,595,650	114,182,098	14.84	302.8	92,663,575	21,518,523	89
1915	25,183,685	126,037,049	152,120,734	19.34	394.7	89,573,041	62,547,693	51
1916	27,283,425	148,213,750	175,497,175	21.84	445.7	114,071,032	61,426,143	67
1917	29,498,400	149,069,600	178,568,009	21.82	445.3	119,110,113	59,457,896	66
1918	32,623,514	248,716,000	281,339,514	33.78	689.4	114,951,618	166,387,896	41
1919	33,084,194	265,665,650	300,749,844	35.47	723.9	118,298,407	182,481,437	39
1920	37,203,890	254,812,400	292,016,290	33.83	690.4	95,538,190	196,478,100	33
1921	34,403,934	234,365,250	298,769,184	30.58	624.1	83,854,487	184,914,697	31

Includes Provincial notes amounting to \$32,857 in 1890 and reduced gradually to \$27,743 in 1921.

Includes issue of \$50,000 notes in 1919, 1920, and 1921.

Circulation in 1900 is taken as 100.

## 41.—Denominations of Dominion Notes in Circulation, March 31, 1916-1921.

Denominations.	1916.	1917.	1918.	1919.	1920.	1921.
\$	\$	\$	\$	\$	\$	\$
1.....	12,710,797	13,600,274	14,414,114	15,217,261	16,550,738	16,456,102
2.....	9,216,471	10,441,369	11,356,895	12,161,480	13,238,915	12,819,010
4.....	47,491	44,251	42,187	39,439	38,299	37,567
5.....	2,728,578	3,253,092	4,813,508	4,772,455	3,434,275	3,699,880
50.....	10,250	10,150	5,350	4,200	3,950	3,800
100.....	2,000	1,600	400	—	—	—
500.....	2,100,000	2,187,500	2,355,500	1,868,500	2,596,000	2,683,500
1,000.....	4,505,000	4,339,000	3,841,000	4,146,000	4,773,000	5,050,000
500 special.....	238,500	196,500	174,000	124,500	95,000	70,000
1,000 ".....	1,461,000	1,612,000	1,375,000	992,000	1,159,000	962,000
5,000 ".....	143,975,000	146,450,000	211,230,000	213,505,000	234,105,000	191,980,000
50,000! ".....	—	—	—	44,000,000	34,650,000	42,800,000
Fractional.....	920,271	1,085,482	1,163,141	1,200,120	1,260,872	1,293,283
Provincial.....	27,774	27,769	27,766	27,743	27,743	27,743
<b>Total.....</b>	<b>177,943,132</b>	<b>183,248,987</b>	<b>250,798,861</b>	<b>298,058,698</b>	<b>311,932,792</b>	<b>277,882,885</b>

<sup>1</sup>First issue of \$50,000 Notes appears in bank statement of September, 1918, amounting to \$5,000,000.

42.—Statistics of Bank Note Circulation, 1892-1921.<sup>1</sup>

Year.	Paid up Capital.	'Rest' Fund.	'Redemption' Fund. <sup>2</sup> (Deposits with Minister of Finance.)	Notes in Circulation.		
				Amount.	Index No. (1900=100)	Per Capita.
	\$	\$	\$	\$		\$
1892.....	61,626,311	24,511,709	1,314,240	33,788,679	72.5	6.91
1893.....	62,009,346	25,837,753	1,790,619	33,811,925	72.6	6.85
1894.....	62,063,371	27,041,232	1,817,511	31,166,003	66.9	6.37
1895.....	61,800,700	27,273,494	1,814,089	30,807,041	66.1	6.12
1896.....	62,043,173	26,526,632	1,831,191	31,456,297	67.5	6.18
1897.....	62,027,703	27,087,782	1,864,937	34,350,118	73.7	6.68
1898.....	62,571,920	27,627,520	1,938,660	37,873,934	81.3	7.28
1899.....	63,726,399	28,958,988	2,038,865	41,513,139	89.2	7.89
1900.....	65,154,594	32,372,395	2,221,128	46,574,780	100.0	8.75
1901.....	67,035,615	36,249,145	2,487,514	50,601,205	108.6	9.36
1902.....	69,869,670	40,212,943	2,832,400	55,412,598	118.9	10.02
1903.....	76,453,125	47,761,536	2,971,260	60,244,072	129.3	10.62
1904.....	79,234,191	52,082,335	3,237,891	61,769,888	132.6	10.60
1905.....	82,655,828	56,474,123	3,448,463	64,025,643	137.5	10.68
1906.....	91,035,604	64,002,266	3,923,531	70,638,870	151.7	11.44
1907.....	95,953,732	69,806,892	4,304,524	75,784,482	162.7	12.02
1908.....	96,147,526	72,041,265	4,249,367	71,401,697	153.3	11.00
1909.....	97,329,333	75,887,695	4,317,096	73,943,119	158.8	11.04
1910.....	98,787,929	79,970,346	4,844,475	82,120,303	176.3	11.87
1911.....	103,009,256	88,892,256	5,353,838	89,982,223	193.2	12.57
1912.....	112,730,943	102,090,476	6,211,881	100,146,541	215.0	13.60
1913.....	116,297,729	109,129,393	6,536,341	105,265,336	226.0	13.98
1914.....	114,759,807	113,130,626	6,693,684	104,600,185	224.6	13.60
1915.....	113,982,741	113,020,310	6,756,648	105,137,092	225.7	13.37
1916.....	113,175,353	112,989,541	6,811,213	126,691,913	272.0	15.77
1917.....	111,637,755	113,560,997	6,324,442	161,029,606	345.7	19.69
1918.....	110,618,504	114,041,500	5,817,646	198,645,254	426.5	23.85
1919.....	115,004,960	121,160,774	6,054,419	218,919,261	470.0	25.82
1920.....	123,617,120	128,756,690	6,122,715	228,800,379	491.3	26.51
1921.....	129,096,339	134,104,030	6,417,287	194,621,710	417.9	22.15

<sup>1</sup>The statistics in this table are averages computed from monthly returns in each year.

<sup>2</sup>Cash, i.e., gold or Dominion notes.



## 43.—Circulating Medium in Hands of the Public, 1900-1921.

Year.	Silver.			Bronze.			Bank Notes.			Dominion Notes <sup>1</sup> \$1, \$2, \$4, \$5 and fractional.			Totals.		
	Amount.	Per Capita.		Amount.	Per Capita.		Amount.	Per Capita.		Amount.	Per Capita.		Amount.	Per Capita.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	Index Number per Capita. <sup>5</sup>
1900.....	7,911,998	1.49		635,429	.11		46,574,780	8.75		9,640,473	1.81		64,762,680	12.17	100.0
1901.....	8,279,924	1.53		676,429	.12		50,801,205	9.36		10,161,809	1.88		69,719,337	12.90	105.0
1902.....	9,053,924	1.64		706,429	.13		55,412,598	10.02		11,029,085	1.99		76,202,936	13.77	113.1
1903.....	9,687,774	1.70		746,429	.13		60,344,072	10.62		12,173,948	2.15		82,551,523	14.60	120.0
1904.....	10,037,774	1.71		771,429	.13		61,769,888	10.60		12,581,833	2.16		85,160,924	14.62	120.1
1905.....	10,487,774	1.72		791,429	.13		64,025,043	10.68		13,045,820	2.18		88,350,666	14.74	121.1
1906.....	11,295,235	1.79		832,429	.13		70,638,870	11.45		14,633,576	2.37		97,400,110	15.78	129.7
1907.....	12,489,235	1.88		864,429	.13		75,784,482	12.03		15,939,131	2.53		105,077,277	16.67	137.0
1908.....	12,527,776	1.80		886,033	.13		71,401,697	11.00		15,270,675	2.35		100,098,151	15.42	126.7
1909.....	13,176,476	1.83		925,333	.13		73,943,119	11.04		15,860,149	2.37		103,903,077	15.52	127.5
1910.....	14,327,662	1.91		967,353	.13		82,120,303	11.87		17,871,477	2.58		115,286,795	16.67	137.0
1911.....	15,670,663	2.18		1,021,628	.14		89,982,223	12.49		19,840,695	2.75		126,515,209	17.56	144.3
1912.....	16,973,900	2.30		1,071,605	.15		100,146,541	13.60		22,982,588	3.12		141,174,634	19.17	157.5
1913.....	17,901,031	2.38		1,127,177	.15		105,265,336	13.98		28,845,737	3.83		153,139,281	20.34	167.1
1914.....	18,527,229	2.41		1,162,234	.15		104,600,185	13.60		24,586,448	3.20		148,876,096	19.34	158.9
1915.....	18,588,573	2.36		1,212,588	.15		105,137,092	13.37		25,183,685	3.20		150,121,938	19.09	156.9
1916.....	19,768,089	2.46		1,323,234	.17		126,691,913	15.77		27,283,425	3.39		175,066,661	21.79	179.0
1917.....	21,559,030	2.64		1,440,034	.18		161,029,606	19.69		29,498,409	3.61		213,527,079	26.13	214.7
1918.....	23,888,121	2.87		1,571,811	.19		198,645,254	23.12		32,623,514	3.92		256,728,700	30.83	253.3
1919.....	27,084,148	3.10		1,686,822	.20		218,919,261	23.82		35,084,194	4.14		282,774,425	33.35	274.0
1920.....	28,384,850	3.28		1,895,783	.22		228,800,379	26.51		37,203,890	4.31		296,284,902	34.33	282.1
1921.....	28,344,639	3.23		1,956,326	.22		194,621,710	22.15		34,403,934	3.91		259,326,629	29.51	242.5

<sup>1</sup>Dominion Notes of larger denominations in hands of banks not included.<sup>2</sup>Includes Provincial Notes amounting to \$28,811 in 1900 and reduced gradually to \$27,743 in 1921.<sup>3</sup>Yearly average.<sup>4</sup>At end of June in each year.<sup>5</sup>Per capita circulation in 1900=100.

**Banking.**

In the early days of banking in older countries, one of the chief functions of banks was to issue promissory notes payable to the bearer on demand; where the bank's credit was good these notes passed freely from hand to hand, creating an auxiliary uniform circulating medium, which in various cases was preferred to that issued by national governments.

The lack of a uniform circulating medium in Canada was felt by the merchants of Montreal toward the end of the eighteenth century, and the prospectus of a proposed bank of issue to be known as The Canada Banking Company was issued in 1792. This scheme, however, was allowed to drop, while a second project in 1808 for the incorporation of a Bank of Canada, failed to secure the assent of the legislature of Lower Canada.

At the close of the war of 1812 the Army Bill currency was withdrawn, and public attention once more turned to the expediency of securing a currency through the establishment of banks. The Bank of Montreal began business toward the end of 1817, with a charter based on that of the first Bank of the United States. In the following year the Quebec Bank was established, as well as the Bank of Canada at Montreal and the Bank of Upper Canada at Kingston. The three Lower Canadian institutions, commencing as private banks, obtained their charters in 1822, while the bank of Upper Canada, also a private institution, was superseded by a second Bank of Upper Canada, established at York (Toronto) as a chartered bank in 1821. Meanwhile the Bank of New Brunswick had been incorporated in 1820, while in Nova Scotia the Halifax Banking Co. (private) had commenced business in 1825, and the Bank of Nova Scotia received a regular charter in 1832. The Bank of British North America, previously incorporated in Great Britain, commenced business in Canada in 1836, while Molson's Bank was established in 1853, the Bank of Toronto in 1855, the Banque Nationale in 1860 and the Banque Jacques-Cartier (now the Banque Provinciale du Canada) in 1862. The Merchants Bank was established in 1864, the Union Bank in 1866, the Canadian Bank of Commerce in 1867, the Merchants' Bank of Halifax (now the Royal Bank) in 1869, the Dominion Bank in 1871, the Bank of Hamilton in 1872, the Banque d'Hochelaga in 1873, the Bank of Ottawa in 1874, the Imperial Bank in 1875 and the Standard Bank in 1876.

**Banking Legislation.**—As has already been stated, note issue was formerly considered as the chief function of the banks and banking legislation dealt mainly with note issue. In 1830 the Banking Act was amended so that the total amount of notes of less than \$5 in circulation might not at any one time exceed one-fifth of the paid up capital; that no notes under \$1 should be issued and that all issues of less than \$5 might be limited or suppressed by the legislature. In 1841, in the first session of the Canadian Legislature after the Union, the Banking Act imposed a tax of one p.c. upon the bank note circulation together with the double liability. In 1850 a new Act prohibited any bank other than those incorporated by Act of Parliament or Royal Charter from issuing notes. The tax on circulation was abolished, and instead a deposit with the Government of \$100,000 in provincial debentures was required; for the first time monthly bank statements were required to be furnished to the Government.

In 1871 the first Dominion Bank Act provided for a minimum capital of \$500,000, the restriction of bank note issue to notes of \$4 and upwards, the redemption by banks of their own notes at any of their offices, the limitation of dividends until a reasonably large reserve fund had been accumulated, the holding of Dominion notes to the extent of at least one-third of the cash reserve, the prohibition of a bank lending money on its own stock; the forfeiture of the charter of any bank which left any of its liabilities unpaid for 90 days; also, in order that the double liability might be effectively enforced, banks were required to transmit certified lists of shareholders to the Minister of Finance. The charters were granted for ten years only, so as to facilitate the contemplated decennial revisions of the Act.

The first revision of the Bank Act took place in 1881. The noteholder was now recognized as prior creditor, the banks were prohibited from issuing notes under \$5, while notes of higher denomination were to be multiples of this sum, Dominion notes were to constitute not less than 40 p.c. of the banks' cash reserve and banks were upon request to pay in Dominion notes sums not exceeding \$50.

At the second revision of the Bank Act (1891) the chief change was the establishment of the Bank Note Circulation Redemption Fund, founded as a consequence of the losses to which the noteholders of insolvent banks were still subjected through being unable to turn their notes into cash. It was provided that bank notes should bear interest from the day of suspension of the bank until the date when their redemption is undertaken either by the liquidator, or if he does not do so within two months, the Minister of Finance may redeem them out of the Bank Note Circulation Redemption Fund, which,

if not recompensed for its expenditure out of the assets of the failed bank, must be reimbursed by contributions from the other banks *pro rata* to circulation.

At the third regular revision of the Bank Act in 1901 the Canadian Bankers' Association was given authority to appoint an Inspector to supervise the bank note circulation and see that no bank issued circulation in excess of its paid-up capital. In 1908 provision was made for emergency circulation during the crop-raising season from October to January, during which banks were allowed to issue excess circulation up to 15 p.c. of their combined paid-up capital and reserve or rest fund, this emergency circulation to be taxed at the rate of 5 p.c. per annum. In 1912 the period during which emergency circulation might be issued was extended to the six months from September to February inclusive.

At the fourth revision, which took place in 1913, the Bank Act was amended by providing for the establishment of central gold reserves in which banks might deposit gold or Dominion notes and issue additional notes of their own against such deposit. A shareholders' audit was also provided for. As a consequence of the war the provision for emergency circulation was extended to cover the whole year in 1914, while banks were authorized to make payments in their notes instead of in gold or Dominion notes.

**Chartered Banks in Canada.**—During the period from 1881 to 1901, the number of chartered banks doing business in Canada under the Bank Act remained almost the same, 36 in 1881 and 1891 and 34 in 1901, but during the present century there has been in banking as in industry an era of amalgamations, the number of chartered banks being reduced to 25 in 1913 and 17 in 1922. That this has been far from involving a curtailment of banking facilities is shown by Table 44, which shows the development of the banking business since 1868, and by Table 45, which compares the number of branch banks existing in Canada at different periods, showing a growth from 123 at Confederation to 4,659 as at December 31, 1921, besides 206 branches in other countries. Table 47 gives the number of branches of the various banks by provinces as at December 31, 1921, while Table 46 contains the statistics of branches of Canadian banks doing business outside of Canada, an extension of Canadian banking (more especially to Newfoundland and the West Indies) which has proceeded very rapidly in recent years.<sup>1</sup> Table 48 shows that the

<sup>1</sup> The statistics of Tables 45, 46 and 47 have been furnished by the Canadian Bankers' Association.



total assets of the chartered banks at December 31, 1921, were \$2,746,732,605, as compared with \$3,056,979,489 in 1920. The total liabilities to the public were \$2,472,350,424, as compared with \$2,778,308,547 in 1920. Deposits by the public in Canada were \$1,781,749,790 at December 31, 1921 (Table 50), as compared with \$1,950,504,230 in 1920. All these declines were due to the continuance of deflation during the year. On March 31, 1921, the total at the credit of the depositors in the Post Office and Dominion Government Savings Banks was \$39,160,808, as compared with \$42,334,-812 in 1920 (Table 61).

**Bank Reserves.**—The Bank Act contains no specific provisions as to the amount of gold to be held either against note circulation or the general business of the bank. It requires, however, that 40 p.c. of whatever reserve a bank finds expedient to carry shall be in Dominion notes. A second provision instructs the Minister of Finance to arrange for the delivery of Dominion notes to any bank in exchange for specie. Thus the gold reserve against Dominion notes, to the extent that the notes are held by the banks, is reserve against banking operations, the Dominion Government being the custodian of the gold for the banks. The other gold element in bank reserves is specie in hand. The sum of the two constitutes the gold basis of the Canadian banking system. In addition to the reserves above mentioned, the Canadian banks carry three other kinds of asset which are regarded as reserves, being funds more or less immediately available for the liquidation of liabilities. These are (1) cash balances in banks outside of Canada; (2) call and short loans in New York; and (3) easily marketable securities. These are shown together with the total and net liabilities in Table 56. In Table 57 the ratio to net liabilities of each element of the reserve is shown.

**Deposits and Loans and Discounts.**—The above are the foundations upon which the banking credit of Canada rests. The expansion of that credit is shown by the figures of deposits and loans and discounts in Tables 51 and 52. The deposits payable on demand, with those payable after notice or on a fixed day (Table 51) are probably a good index of the deposits which are subject to cheque, and which therefore constitute the basis of credit as circulating medium, for although notice is required by law before the greater part of these deposits can be withdrawn this right is seldom or never claimed, and even savings accounts are chequed against to a considerable extent.

## 44.—Historical Summary Showing Development of the Canadian Banking Business, 1868-1921.

Calendar Year.	Capital paid up.	Reserve Fund.	Notes in Circulation.	Total on Deposit. <sup>1</sup>	Total of Discounts to the public.	Total Liabilities to the public.	Total Assets.	Percentage of Liabilities to Assets.
	\$	\$	£	\$	\$	\$	\$	
1868.....	30,507,447	—	9,350,646	33,653,594	52,299,050	45,144,854	79,800,976	56.55
1869.....	30,782,637	—	9,539,511	40,028,090	56,433,953	50,940,226	86,283,693	59.04
1870.....	33,031,249	—	15,149,031	48,763,205	66,276,961	65,685,870	103,197,103	63.65
1871.....	37,095,340	—	20,914,637	56,287,391	84,799,841	80,250,974	125,273,631	64.06
1872.....	45,190,085	—	25,296,454	61,431,432	106,734,665	90,864,688	148,582,445	61.04
1873.....	54,690,561	—	27,165,878	63,426,042	119,274,317	98,982,668	166,056,595	56.60
1874.....	60,388,340	—	27,904,963	77,113,754	131,650,111	116,412,392	187,921,031	61.95
1875.....	64,619,513	—	23,035,639	74,642,446	136,029,307	104,609,356	186,255,330	56.17
1876.....	66,804,398	—	21,245,935	72,852,686	127,621,577	99,614,014	183,499,801	54.29
1877.....	65,206,009	—	20,704,338	74,166,287	125,681,658	99,810,731	181,019,194	55.14
1878.....	63,682,863	—	20,475,586	70,856,253	119,682,659	95,538,831	175,450,274	54.45
1879.....	62,737,276	—	19,486,103	73,151,425	113,455,108	96,760,113	173,548,400	55.75
1880.....	60,052,117	—	22,529,623	85,303,814	102,166,115	111,838,941	184,276,190	60.69
1881.....	59,534,977	—	28,516,692	94,346,481	116,953,497	127,176,249	200,613,879	63.39
1882.....	59,790,644	—	33,582,080	110,133,124	140,077,194	149,777,214	227,426,835	65.86
1883.....	61,390,118	—	33,283,302	107,648,383	143,944,657	145,938,095	228,054,650	63.98
1884.....	61,579,021	18,149,193	30,449,410	102,398,228	130,490,053	137,493,917	219,998,642	62.50
1885.....	61,711,566	17,879,716	30,720,762	104,014,660	126,827,792	138,762,695	219,147,080	63.32
1886.....	61,662,093	17,817,693	31,030,499	111,449,365	132,833,313	146,954,260	228,061,872	64.44
1887.....	60,800,561	17,873,382	32,478,118	112,656,985	139,753,755	149,704,402	230,393,072	64.98
1888.....	60,345,035	18,329,911	32,205,259	125,136,473	141,002,373	163,990,797	243,504,164	67.35
1889.....	60,229,732	19,766,426	32,207,144	134,650,732	149,958,980	173,029,602	253,789,803	68.18
1890.....	59,974,902	21,127,838	32,834,511	135,548,704	153,301,335	173,207,587	254,546,329	68.05
1891.....	60,700,697	22,821,501	33,061,042	148,396,968	171,082,677	187,332,325	269,307,932	69.56
1892.....	61,626,311	24,511,709	33,788,679	166,668,471	193,455,883	208,082,169	291,635,251	71.24
1893.....	62,009,346	25,837,753	33,811,925	174,776,722	206,623,042	217,195,975	302,696,715	71.75
1894.....	62,063,371	27,041,235	31,166,003	181,743,890	204,124,939	221,066,724	307,590,020	71.87
1895.....	61,800,700	27,273,500	30,807,041	190,916,939	203,730,800	229,794,322	316,536,510	72.50

NOTE.—The statistics in this table are averages computed from the twelve monthly returns.

<sup>1</sup>Includes the deposits of Federal and Provincial Governments.

44.—Historical Summary Showing Development of the Canadian Banking Business, 1868-1921—continued.

Calendar Year.	Capital paid up.	Reserve Fund.	Notes in Circulation.	Total on Deposit. <sup>1</sup>	Total of Di-counts to the public.	Total Liabilities to the public.	Total Assets.	Percentage of Liabilities to Assets.
	\$	\$	\$	\$	\$	\$	\$	p.c.
1896	62,043,173	26,526,632	31,456,207	193,616,049	213,211,906	232,338,086	320,937,643	72.39
1897	62,027,703	27,087,782	34,350,118	211,788,096	212,014,635	252,660,708	341,163,505	74.06
1898	62,571,920	27,627,520	37,873,994	236,101,062	223,806,320	281,076,686	370,583,991	75.86
1899	63,726,989	28,958,989	41,513,159	266,304,528	251,467,076	318,624,033	412,504,768	77.24
1900	65,154,594	32,372,394	46,574,780	305,140,242	279,273,761	356,394,093	459,715,065	77.52
1901	67,035,615	36,249,145	50,601,205	349,573,327 <sup>2</sup>	338,209,888	420,003,743	531,829,324	78.97
1902	69,869,670	40,212,943	55,412,598	390,370,493 <sup>2</sup>	430,662,670	466,963,829	585,761,109	79.72
1903	76,453,125	47,761,536	60,244,072	424,167,140 <sup>2</sup>	472,019,689	507,527,550	641,543,226	79.11
1904	79,234,191	52,082,335	61,769,888	470,265,744 <sup>2</sup>	509,011,993	554,014,076	695,417,756	79.67
1905	82,655,828	56,474,124	64,035,643	531,243,476 <sup>2</sup>	559,814,918	618,678,633	767,490,183	80.61
1906	91,035,604	64,002,266	70,638,870	605,968,513 <sup>2</sup>	655,869,879	713,790,553	878,512,076	81.25
1907	95,953,732	69,806,892	75,734,482	654,839,711 <sup>2</sup>	709,975,273	769,026,924	945,685,708	81.32
1908	96,147,526	72,041,265	71,401,697	658,367,015 <sup>2</sup>	670,170,833	762,077,184	941,290,619	80.96
1909	97,329,333	75,887,695	73,943,119	783,298,880 <sup>2</sup>	762,105,546	882,598,547	1,067,007,534	82.72
1910	98,787,929	79,970,346	82,120,303	909,364,839 <sup>2</sup>	870,100,890	1,019,177,601	1,211,452,351	84.13
1911	103,009,256	88,892,256	89,982,223	980,433,788 <sup>2</sup>	926,909,616	1,097,661,393	1,303,131,260	84.23
1912	112,730,943	102,090,478	100,146,541	1,102,910,353 <sup>2</sup>	1,061,843,991	1,240,124,354	1,470,065,478	84.36
1913	116,297,730	109,129,336	105,265,336	1,126,871,523 <sup>2</sup>	1,111,993,263	1,287,372,534	1,530,093,671	84.14
1914	114,759,807	113,130,626	104,600,185	1,144,210,363 <sup>2</sup>	1,101,880,924	1,309,944,006	1,555,676,395	84.20
1915	113,952,741	113,020,310	105,137,092	1,198,340,313 <sup>2</sup>	1,066,282,854	1,353,629,123	1,596,424,643	84.75
1916	113,175,353	112,989,541	126,691,913	1,418,035,429 <sup>2</sup>	1,135,866,531	1,596,905,337	1,839,286,709	86.82
1917	111,637,735	113,560,997	161,029,606	1,643,203,020 <sup>2</sup>	1,219,161,252	1,866,228,236	2,111,559,555	88.38
1918	110,618,504	114,041,500	198,645,234	1,912,395,780 <sup>2</sup>	1,339,660,669	2,184,350,820	2,432,331,418	89.81
1919	115,094,960	121,160,774	218,919,261	2,180,428,883 <sup>2</sup>	1,532,971,202	2,493,382,568	2,754,568,118	90.60
1920	123,617,120	128,756,690	228,800,379	2,438,079,792 <sup>2</sup>	1,935,449,637	2,784,068,698	3,064,133,843	90.86
1921	129,096,339	134,104,030	194,621,710	2,264,536,736 <sup>2</sup>	1,781,184,115	2,556,454,190	2,841,782,079	89.96

NOTE.—The statistics in this table are averages computed from the twelve monthly returns.

<sup>1</sup>Includes the deposits of Federal and Provincial Governments.<sup>2</sup>Includes amounts deposited elsewhere than in Canada, not included in deposits, prior to 1901. For statistics of such deposits in recent years, see Table 51, p. 723.

## 45.—Number of Branches of Banks in Canada, by Provinces, 1868, 1902, 1905 and 1915-21.

Provinces.	1868.	1902.	1905.	1915.	1916. <sup>1</sup>	1917. <sup>1</sup>	1918. <sup>1</sup>	1919. <sup>1</sup>	1920. <sup>1</sup>	1921. <sup>1</sup>
Prince Edward Island.....	—	9	10	17	17	17	24	36	41	40
Nova Scotia.....	5	89	101	109	111	119	123	155	169	166
New Brunswick.....	4	35	49	79	82	83	84	111	121	122
Quebec.....	12	137	196	716	784	821	795	1,055	1,150	1,236
Ontario.....	100	349	549	1,164	1,154	1,169	1,165	1,451	1,586	1,574
Manitoba.....	—	52	95	204	200	203	254	322	349	329
Saskatchewan.....	}	30	87	401	413	441	506	581	591	549
Alberta.....				258	247	267	307	408	424	396
British Columbia.....	2	46	55	208	187	183	179	215	242	244
Yukon.....	—	—	3	3	3	3	3	3	3	3
<b>Total.....</b>	<b>123</b>	<b>747</b>	<b>1,145</b>	<b>3,159</b>	<b>3,198</b>	<b>3,306</b>	<b>3,440</b>	<b>4,337</b>	<b>4,676</b>	<b>4,659</b>

<sup>1</sup>Includes sub-agencies for receiving deposits for the Banks employing them.

## 46.—Number of Branches of Canadian Chartered Banks in other countries with their location, December 31, 1921.

Banks and Location.	Branches.	Banks and Location.	Branches.
	No.		No.
Bank of Montreal:—		Canadian Bank of Commerce:—	
Great Britain.....	2 <sup>1</sup>	Newfoundland.....	5
United States.....	4	United States.....	4
France.....	1	Great Britain.....	1
Newfoundland.....	8	St. Pierre-Miquelon.....	1
Mexico.....	1	Mexico.....	1
		Barbados.....	1
Bank of Nova Scotia:—		Cuba.....	1
Newfoundland.....	26 <sup>2</sup>	Jamaica.....	1
Jamaica.....	11	Trinidad.....	1
United States.....	3	Brazil.....	1
Porto Rico.....	3		
Dominican Republic.....	3	Royal Bank:—	
England (London).....	1	Cuba.....	54
Cuba.....	1	B. W. Indies.....	20 <sup>1</sup>
West Indies.....	1 <sup>3</sup>	Newfoundland.....	8
Banque Nationale:—		Dominican Republic.....	6
France.....	1	Venezuela.....	3
Merchants Bank:—		Porto Rico.....	3
England (London).....	1	Brazil.....	3
United States (New York).....	1	British Guiana.....	3
Union Bank:—		Haiti.....	3
England.....	2	French West Indies.....	3
United States.....	1	Argentina.....	2
		British Honduras.....	1
		Colombia.....	1
		Costa Rica.....	1
		Uruguay.....	1
		Spain.....	1
		United States.....	1
		Great Britain.....	1
		France.....	1
		Dominion Bank:—	
		England (London).....	1
		United States (New York).....	1
		<b>Total.....</b>	<b>206</b>

<sup>1</sup>Includes 1 sub-agency.<sup>2</sup>Includes 2 sub-agencies.<sup>3</sup>Sub-agency.



47.—Number of Branches of Chartered Banks, by Provinces, as at December 31, 1921.

Chartered Banks.	P.E. Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.	Mani- toba.	Saskat- chewan.	Alberta.	British Colum- bia.	Yukon.	Other Coun- tries.	Pro- vincial Sub- agencies	Total.
Bank of Montreal.....	1	14	16	49	93	17	38	15	48	1	161	13	321
Bank of Nova Scotia.....	11	46	42	20	133	10	16	4	4	—	492	25	360
Bank of Toronto.....	—	—	—	10	83	13	33	14	4	—	—	—	157
Molson Bank.....	—	—	—	47	73	2	—	4	3	—	—	—	129
Banque Nationale.....	—	—	—	101	2	—	—	—	—	—	1	244	348
Merchants Bank of Canada.....	—	3	1	45	132	34	38	75	16	—	2	43	389
Banque Provinciale du Canada.....	3	—	14	78	14	—	—	—	—	—	—	192	301
Union Bank of Canada.....	1	3	3	9	92	66	108	65	9	—	3	13	372
Canadian Bank of Commerce.....	10	24	7	78	126	35	78	68	58	2	17	23	526
Royal Bank of Canada.....	10	71	25	63	194	38	92	41	55	—	1162	25	730
Dominion Bank.....	—	—	—	6	85	16	7	7	4	—	2	4	131
Bank of Hamilton.....	—	—	—	1	73	33	27	15	11	—	—	—	160
Standard Bank of Canada.....	—	—	1	1	109	6	19	21	1	—	—	15	173
La Banque d'Hyochelaga.....	—	—	—	133	23	11	12	12	—	—	—	174	365
Imperial Bank of Canada.....	—	—	—	3	88	10	27	29	13	—	—	49	219
Home Bank of Canada.....	—	—	—	4	40	9	9	2	2	—	—	11	77
Sterling Bank of Canada.....	—	—	—	1	70	7	4	—	—	—	—	—	82
Weyburn Security Bank.....	—	—	—	—	—	—	24	—	—	—	—	1	25
<b>Total</b> .....	36	161	109	649	1,430	307	532	372	278	3	206	832	4,865
Sub-Agencies (Provincial).....	4	5	13	587	144	22	17	24	16	—	—	—	—
<b>Total</b> .....	40	166	122	1,236	1,574	329	549	396	244	3	206	—	4,865

<sup>1</sup>Includes 1 sub-agency.    <sup>2</sup>Includes 3 sub-agencies.    <sup>3</sup>Includes 1 sub-agency.

48.—Assets of Chartered Banks of Canada, December 31, 1921.

Chartered Banks.	Deposit in the Central Gold Re- serves.	Specie.	Dominion Notes.	Call and short loans in Canada.	Current loans in Can- ada. <sup>2</sup>	Other Assets.	Total Assets.
	\$	\$	\$	\$	\$	\$	\$
Bank of Montreal.....	17,200,000	25,823,597	66,139,169	3,150,588	181,409,972	216,894,906	510,618,232
Bank of Nova Scotia.....	6,500,000	11,528,449	20,934,292	7,502,162	94,635,424	84,206,071	225,306,398
Bank of Toronto.....	2,200,000	981,153	5,707,162	6,705,476	51,228,969	25,223,267	92,136,017
Molson Bank.....	1,500,000	590,422	3,267,793	6,654,818	43,607,385	22,837,669	78,458,087
Banque Nationale.....	2,800,000	420,621	1,362,428	7,437,743	35,361,580	18,414,079	65,796,451
Merchants Bank of Canada.....	2,000,000	4,091,467	4,336,011	5,596,117	94,054,701	50,001,509	160,079,805
Banque Provinciale du Canada.....	—	159,396	206,522	5,887,154	16,521,858	18,277,287	41,052,217
Union Bank of Canada.....	1,350,000	1,179,971	8,606,286	3,811,148	70,391,767	58,276,203	143,615,375
Canadian Bank of Commerce.....	9,500,000	12,849,150	24,252,712	16,920,086	199,340,418	133,609,666	396,482,032
Royal Bank of Canada.....	14,000,000	13,866,285	22,963,832	16,769,626	155,655,475	260,620,382	483,845,600
Dominion Bank.....	1,700,000	2,117,000	15,715,807	6,561,853	63,710,573	41,530,709	131,335,942
Bank of Hamilton.....	500,000	936,830	3,515,257	6,812,757	49,487,287	20,407,288	81,659,419
Standard Bank of Canada.....	1,900,000	1,732,229	5,894,240	5,555,844	47,346,561	22,495,249	84,922,123
Banque d'Hochelaga.....	2,300,000	504,498	2,765,301	6,753,004	44,219,740	18,859,594	75,402,137
Imperial Bank of Canada.....	5,002,533	1,782,889	7,307,471	5,279,939	66,139,147	35,949,074	121,461,053
Home Bank of Canada.....	—	186,891	1,515,915	1,630,481	16,317,050	8,705,155	28,345,492
Sterling Bank of Canada.....	—	84,203	1,016,157	54,293	7,162,661	14,314,739	22,632,053
Weyburn Security Bank.....	—	16,232	124,542	—	2,111,801	1,331,597	3,584,172
<b>Total.....</b>	<b>68,452,533<sup>1</sup></b>	<b>78,851,283</b>	<b>195,730,887</b>	<b>113,071,689</b>	<b>1,238,672,369</b>	<b>1,051,951,444</b>	<b>2,746,732,605</b>

<sup>1</sup> Of this deposit \$10,502,533 is in gold coin; the balance in Dominion notes.<sup>2</sup> Includes loans to cities, towns, municipalities and school districts.

## 49.—Liabilities of Chartered Banks of Canada, December 31, 1921.

Chartered Banks.	Capital paid up.	Reserve fund.	Notes in circulation.	Deposits by the public in Canada.	Other liabilities.	Total liabilities. <sup>1</sup>	Rate p.c. of last dividend.
	\$	\$	\$	\$	\$	\$	p.c.
Bank of Montreal.....	22,000,000	22,000,000	33,748,434	323,271,975	106,002,392	463,022,801	12
Bank of Nova Scotia.....	9,700,000	19,000,000	15,852,567	140,820,855	39,867,647	196,541,069	16
Bank of Toronto.....	5,000,000	6,000,000	6,510,903	69,188,420	3,927,045	79,626,368	12
Molson Bank.....	4,000,000	5,000,000	5,363,413	57,355,530	6,231,283	68,950,226	12
Banque Nationale.....	2,000,000	2,400,000	5,175,060	38,208,377	18,017,687	61,401,124	12
Merchants Bank of Canada.....	10,500,000	1,500,000	11,821,785	112,052,257	23,379,574	147,253,616	12
Banque Provinciale du Canada.....	3,000,000	1,500,000	2,916,399	30,564,592	3,113,999	36,594,990	9
Union Bank of Canada.....	8,000,000	6,000,000	9,235,889	92,742,968	26,908,884	128,887,721	10
Canadian Bank of Commerce.....	15,000,000	15,000,000	23,286,019	268,705,546	72,169,062	364,160,627	12
Royal Bank of Canada.....	20,400,000	20,400,000	31,255,261	269,982,063	149,360,220	441,597,544	12
Dominion Bank.....	6,000,000	7,000,000	7,326,571	93,262,086	16,791,549	117,380,206	12
Bank of Hamilton.....	5,000,000	4,850,000	5,220,891	56,865,842	8,741,201	70,827,934	12
Standard Bank of Canada.....	4,000,000	4,948,499	5,496,950	61,855,069	7,450,812	74,802,831	14
Banque d'Hochelega.....	4,000,000	4,000,000	7,018,029	52,514,765	7,333,726	66,866,520	19
Imperial Bank of Canada.....	7,000,000	7,500,000	10,949,847	87,579,986	6,543,868	105,073,701	12
Home Bank of Canada.....	1,959,826	550,000	1,779,770	18,581,135	5,390,454	25,751,559	7
Sterling Bank of Canada.....	1,232,700	500,000	1,211,561	15,064,310	4,501,304	20,777,175	8
Weyburn Security Bank.....	524,560	225,000	433,197	2,134,014	267,401	2,834,612	7
<b>Total</b> .....	<b>129,317,056</b>	<b>128,373,499</b>	<b>184,602,546</b>	<b>1,781,749,790</b>	<b>505,998,088</b>	<b>2,472,550,424</b>	-

<sup>1</sup>Exclusive of capital paid up and reserve fund.

**50.—General Statement of Chartered Banks for the calendar years 1917-21.**

Items.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Capital paid up.....	111,637,755	110,618,504	115,004,960	123,617,120	129,096,339
Notes in circulation.....	161,029,606	198,645,254	218,919,261	228,800,379	194,621,710
Total on deposit <sup>1</sup> .....	1,643,203,020	1,912,395,780	2,189,428,885	2,438,079,792	2,264,586,736
Discounts to the public .....	1,219,161,252	1,339,660,669	1,552,971,202	1,935,449,637	1,781,184,115
Liabilities <sup>2</sup> .....	1,866,228,236	2,184,359,820	2,495,582,568	2,784,068,698	2,556,454,190
Assets.....	2,111,559,555	2,432,331,418	2,754,568,118	3,064,133,843	2,841,782,079

NOTE.—The statistics in this table are averages computed from the monthly returns in each year.  
<sup>1</sup>Including deposits of Dominion and Provincial Governments and including amounts deposited elsewhere than in Canada. <sup>2</sup>Excluding capital and rest or reserve fund.

**51.—Deposits in Chartered Banks in Canada and Elsewhere, for the calendar years 1917-1921.**

Items.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Deposits by the public of Canada—					
Payable on demand.....	468,049,790	587,342,904	621,676,065	653,862,869	551,914,643
Payable after notice or on a fixed day.....	928,271,838	966,341,499	1,125,202,403	1,239,308,076	1,289,347,063
Deposits elsewhere than in Canada.....	178,098,526	206,065,621	238,731,784	335,164,532	285,125,448
Balances due to Dominion and Provincial Governments	68,782,866	152,645,756	203,818,633	209,744,315	138,199,582
<b>Total Deposits.....</b>	<b>1,643,203,020</b>	<b>1,912,395,780</b>	<b>2,189,428,885</b>	<b>2,438,079,792</b>	<b>2,264,586,736</b>

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

**52.—Discounts of Chartered Banks in Canada and elsewhere, for the calendar years 1917-1921.**

Items.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Call and short loans on stocks and bonds in Canada.....	75,246,096	77,555,410	96,673,179	118,956,035	109,542,625
Call and short loans elsewhere than in Canada.....	157,430,643	162,333,308	163,227,204	200,098,050	172,137,325
Current loans in Canada <sup>1</sup> .....	883,669,377	982,822,203	1,140,395,977	1,410,602,684	1,323,158,731
Current loans elsewhere than in Canada.....	91,720,519	106,913,067	140,200,101	186,891,995	156,571,063
Loans to governments.....	5,703,640	5,236,593	8,214,314	13,945,219	12,965,097
Overdue debts.....	5,390,977	4,800,088	4,260,427	4,955,654	6,809,274
<b>Total discounts of banks.....</b>	<b>1,219,161,252</b>	<b>1,339,660,669</b>	<b>1,552,971,202</b>	<b>1,935,449,637</b>	<b>1,781,184,115</b>

NOTE.—The statistics in this table are averages computed from monthly returns in each year.  
<sup>1</sup>Includes loans to cities, towns, municipalities and school districts.



## 53.—Assets of Chartered Banks for the calendar years 1918-1921.

Schedule.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$
Balances due from agencies of the banks or from other banks or agencies in the United Kingdom.....	10,973,606	12,359,426	17,669,923	12,857,830
Balances due from agencies of chartered banks or agencies elsewhere than in Canada and the United Kingdom.....	47,419,961	50,904,693	62,101,182	60,885,266
Bank premises.....	52,605,314	54,499,498	58,111,876	65,808,576
Call and short loans on stocks and bonds in Canada.....	77,555,410	96,673,179	118,956,035	109,542,625
Call and short loans elsewhere than in Canada.....	162,333,308	163,227,204	200,098,050	172,137,325
Current loans in Canada.....	982,822,203	1,140,395,977	1,410,602,684	1,323,158,731
Current loans elsewhere than in Canada.....	106,913,067	140,200,101	186,891,995	156,571,063
Deposit in central gold reserves.....	95,106,667	112,679,167	107,702,722	79,606,700
Deposits made with and balances due from other banks in Canada.....	5,418,511	5,823,388	5,697,820	6,179,469
Deposits with Dominion Government for security of note circulation.....	5,817,646	6,054,419	6,122,715	6,417,287
Dominion notes.....	178,308,722	176,744,958	177,990,416	174,802,401
Dominion and provincial government securities.....	162,821,026	214,621,625	120,356,255	166,688,146
Loans to governments.....	5,236,593	8,214,314	13,945,219	12,965,097
Mortgages on real estate sold by banks.....	1,941,736	2,354,169	2,679,975	3,070,228
Municipal securities in Canada and public securities elsewhere than in Canada.....	252,936,568	256,270,715	210,826,991	156,552,503
Notes of and cheques on other banks.....	112,260,404	132,538,353	175,917,505	162,994,820
Overdue debts.....	4,800,088	4,260,427	4,955,654	6,809,274
Railway and other bonds, debentures and stocks.....	56,103,418	54,429,301	48,031,228	45,728,878
Real estate other than bank premises.....	5,629,595	5,835,339	4,781,361	4,357,257
Specie.....	78,547,452	81,351,598	81,471,916	80,671,931
Other assets.....	26,980,123	35,130,267	49,223,322	33,976,663
<b>Total assets</b> .....	<b>2,432,331,418</b>	<b>2,754,568,118</b>	<b>3,064,133,843</b>	<b>2,841,782,079</b>

NOTE.—The statistics in this table are averages computed from monthly returns in each year.  
 †Includes loans to cities, towns, municipalities and school districts.

## 54.—Liabilities of Chartered Banks for the calendar years 1918-1921.

Schedule.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$
Liabilities to shareholders—				
Capital paid up.....	110,618,504	115,004,960	123,617,120	129,096,339
Rest or reserve fund.....	114,041,500	121,160,774	128,756,690	134,104,030
<b>Total to shareholders</b> .....	<b>224,660,004</b>	<b>236,165,734</b>	<b>252,373,810</b>	<b>263,200,369</b>
Other liabilities—				
Balances due to agencies of Canadian banks, or to other banks or agencies in the United Kingdom.....	4,460,369	5,908,764	7,057,506	8,078,047
Balances due to agencies of Canadian banks, or to other banks or agencies elsewhere than in Canada and the United Kingdom.....	26,737,157	29,901,770	40,380,320	32,532,361
Balance due to Dominion Government after deducting advances for credits, pay lists, etc.....	132,889,924	181,768,998	188,360,129	109,405,020
Balance due to Provincial Governments....	19,755,832	22,049,660	21,384,185	28,794,562

## 54.—Liabilities of Chartered Banks for the calendar years 1918-1921—concluded.

Schedule.	1918.	1919.	1920.	1921.
Other liabilities— <i>Concluded</i>				
Deposits by the public payable on demand in Canada.....	587,342,904	621,676,065	653,862,889	551,914,643
Deposits by the public payable after notice or on a fixed day in Canada.....	966,341,499	1,125,202,403	1,239,308,076	1,289,347,063
Deposits made by and balances due to other banks in Canada.....	9,386,432	10,641,494	11,830,949	11,756,766
Deposits elsewhere than in Canada.....	206,065,621	238,731,784	335,164,532	285,125,448
Notes in circulation.....	198,645,254	218,919,261	228,800,379	194,621,710
Liabilities not included under foregoing heads.....	32,734,828	40,782,369	57,919,753	44,878,570
<b>Total other liabilities.....</b>	<b>2,184,359,820</b>	<b>2,495,582,568</b>	<b>2,784,068,698</b>	<b>2,556,454,190</b>
<b>Total liabilities to shareholders and other liabilities.....</b>	<b>2,409,019,824</b>	<b>2,731,748,302</b>	<b>3,036,442,508</b>	<b>2,819,654,559</b>
Excess of assets over all liabilities—undivided profits not included.....	23,311,594	22,819,816	27,691,335	22,127,520

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

55.—Amount of Exchanges of the Clearing Houses of Chartered Banks in 16 Leading Cities, for the calendar years 1917-1921.<sup>1</sup>

Cities.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Calgary.....	348,663,426	331,334,577	355,011,325	438,073,277	335,465,202
Edmonton.....	142,606,772	171,015,066	233,066,784	294,873,361	260,288,619
Halifax.....	151,812,753	215,289,303	241,300,194	254,677,402	181,802,598
Hamilton.....	244,401,339	262,076,476	306,370,966	380,733,960	297,932,727
London.....	112,664,207	176,958,350	164,126,856	192,157,969	161,956,959
Montreal.....	4,188,255,210	4,833,924,284	6,251,781,893	7,109,189,038	5,720,258,173
Ottawa.....	291,197,713	357,598,751	472,691,921	515,006,231	404,237,694
Quebec.....	213,505,003	238,906,890	290,983,483	364,589,361	302,491,488
St. John, N.B.....	102,948,814	117,133,608	151,319,093	176,672,389	148,973,887
Toronto.....	3,004,785,565	3,379,864,506	4,251,644,303	5,410,214,802	5,105,893,768
Vancouver, B.C.....	419,610,898	545,368,714	654,913,205	846,540,136	708,205,932
Victoria, B.C.....	84,822,216	101,471,852	123,351,345	145,707,106	122,416,244
Winnipeg.....	2,622,924,702	2,362,734,211	2,316,724,063	3,015,703,999	2,682,441,103
Regina.....	169,800,113	184,624,629	210,898,989	231,070,268	203,659,640
Saskatoon.....	94,173,065	91,431,883	105,886,584	118,503,076	100,523,291
Moosejaw.....	64,896,741	78,425,563	86,447,625	94,624,910	74,739,761
<b>Total.....</b>	<b>12,257,068,537</b>	<b>13,448,158,663</b>	<b>16,216,518,629</b>	<b>19,588,337,285</b>	<b>16,811,287,086</b>

<sup>1</sup>From Bradstreet's.

## 56.—Additional Bank Reserves, with Liabilities, 1893-1921.

Year.	Cash Due from			Call and short loans elsewhere than in Canada.			Securities.			Total.			Total Liabilities.		Net Liabilities.	
	Banks in United Kingdom.	Banks elsewhere than in Canada and United Kingdom.	Total.	\$	\$	\$	Dominion and Provincial Government Securities.	Canadian municipal, British, Foreign and Colonial, other than Canadian.	Railway and other Bonds.	\$	\$	\$	\$	\$	\$	\$
1892.....	2,058,538	20,728,669	22,787,207	—	—	3,173,714	7,709,634	7,000,065	17,943,413	208,082,169	200,500,342					
1893.....	2,651,533	17,318,101	19,969,634	—	—	3,221,223	9,223,377	5,919,928	18,364,728	217,105,975	200,917,600					
1894.....	3,439,354	18,904,416	22,343,770	—	—	3,152,962	10,634,982	7,893,695	21,681,659	221,006,734	214,163,371					
1895.....	4,915,458	23,183,161	28,098,619	—	—	2,792,147	9,423,350	9,566,175	21,782,172	229,794,322	222,531,570					
1896.....	7,147,798	24,355,586	31,503,384	—	—	2,802,821	9,310,414	11,505,439	23,618,674	232,338,080	225,090,983					
1897.....	11,149,437	22,060,471	33,209,908	—	—	3,049,525	10,337,510	13,728,645	29,337,510	252,660,708	244,627,721					
1898.....	11,878,548	21,849,137	33,727,685	—	—	4,898,081	16,529,414	17,241,967	38,669,462	281,076,656	271,451,376					
1899.....	11,872,548	24,138,270	36,010,818	—	—	4,952,525	16,622,875	15,032,469	36,598,869	318,624,032	307,537,537					
1900.....	6,072,195	15,443,217	22,415,412	28,228,460 <sup>a</sup>	—	8,163,571	14,364,547	19,561,003	42,089,123	356,394,095	344,672,898					
1901.....	5,598,939	12,811,524	18,410,463	40,020,238	—	11,331,385	13,031,176	30,440,258	54,802,819	420,003,743	405,915,468					
1902.....	6,398,139	13,510,709	20,117,938	46,162,659	—	9,804,998	14,487,632	34,859,390	59,152,021	466,963,829	451,052,607					
1903.....	5,698,494	14,192,232	19,891,186	38,025,662	—	11,186,607	14,896,472	37,800,893	63,883,972	507,527,550	489,439,303					
1904.....	7,523,615	16,817,357	24,340,972	41,212,097	—	10,705,202	15,560,146	38,779,477	65,044,825	554,014,076	534,147,781					
1905.....	9,967,560	19,201,339	29,168,899	51,452,055	—	8,823,697	18,820,985	39,974,520	67,629,132	618,678,632	596,027,264					
1906.....	8,877,979	16,801,119	25,679,098	59,363,639	—	9,360,614	20,460,625	41,125,898	70,947,137	713,790,553	684,185,650					
1907.....	6,027,157	15,365,728	21,392,885	62,897,513	—	9,346,760	21,198,817	41,239,589	71,965,166	769,026,924	737,503,039					
1908.....	9,828,186	10,862,761	20,690,947	60,764,075	—	9,522,743	19,788,837	42,651,008	71,962,686	782,077,184	726,443,676					
1909.....	10,311,864	31,779,144	42,091,008	119,728,263	—	11,653,798	21,707,363	50,783,614	84,144,775	882,598,548	844,098,072					
1910.....	18,892,833	28,301,692	47,194,435	112,777,530	—	14,741,621	21,696,387	56,194,734	92,633,342	1,019,177,601	974,731,187					
1911.....	21,122,092	29,695,985	50,818,077	91,097,704	—	10,637,580	22,848,170	60,909,240	94,394,900	1,007,661,393	1,044,712,367					
1912.....	13,339,926	28,154,996	49,493,992	105,718,070	—	9,388,968	22,386,119	64,080,763	96,055,850	1,240,124,354	1,178,577,787					
1913.....	28,238,329	25,238,329	41,507,971	98,692,615	—	9,995,287	22,386,119	70,713,075	103,891,473	1,287,372,592	1,222,752,292					
1914.....	22,230,533	36,932,958	49,163,491	112,438,696	—	11,617,603	22,707,738	68,636,267	103,041,008	1,309,944,006	1,251,372,615					
1915.....	20,824,559	43,781,939	64,606,490	118,806,692	—	12,814,898	31,553,091	74,020,558	118,388,527	1,353,629,125	1,298,018,989					
1916.....	24,925,192	72,923,228	96,948,420	164,786,760	—	29,717,007	117,902,686	68,386,482	216,606,175	1,596,905,337	1,520,438,686					
1917.....	18,668,648	53,021,952	70,907,600	157,430,643	—	31,078,854	183,341,125	58,958,908	373,378,887	1,866,228,236	1,771,264,882					
1918.....	13,973,606	47,419,961	58,393,567	162,821,026	—	25,936,568	252,936,686	56,103,418	471,861,012	2,184,359,820	2,071,307,749					
1919.....	12,350,426	50,904,693	63,264,119	163,227,204	—	214,621,625	256,270,715	54,429,301	525,321,641	2,495,382,568	2,363,044,215					
1920.....	17,669,923	62,100,182	79,770,105	200,098,050	—	120,356,255	210,826,991	48,031,228	379,214,474	2,784,065,698	2,608,151,193					
1921.....	12,857,830	60,885,266	73,743,096	172,137,325	—	166,688,146	156,552,503	45,728,878	368,969,527	2,556,454,190	2,393,459,361					

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

<sup>a</sup>Six months, July to Dec., 1900.

57.—Ratio of Bank Reserves to Net Liabilities, 1892-1921.

Year.	Cash on hand.	Cash due from banks outside of Canada.	Call and short loans elsewhere than in Canada.	Securities.	Total Reserves.
	p.c.	p.c.	p.c.	p.c.	p.c.
1892	8.8	11.3	—	8.9	29.0
1893	9.4	9.5	—	8.7	27.6
1894	10.4	10.4	—	10.1	30.9
1895	10.4	12.6	—	9.8	32.8
1896	9.9	10.8	—	10.5	31.2
1897	10.3	13.6	—	11.9	35.8
1898	9.3	12.1	—	14.2	35.6
1899	8.7	11.7	—	11.8	32.2
1900	8.4	6.5	—	12.2	27.1
1901	8.0	4.5	10.0	13.5	36.0
1902	7.9	4.4	10.2	13.1	35.6
1903	8.9	4.0	7.7	13.0	33.6
1904	9.4	4.5	7.7	12.1	33.7
1905	9.5	4.9	8.6	11.3	34.3
1906	8.9	3.7	8.7	10.4	31.7
1907	9.5	2.9	7.2	9.7	29.3
1908	11.1	5.5	8.3	9.9	34.8
1909	11.3	5.0	14.2	9.9	40.4
1910	10.7	4.8	11.5	9.5	36.5
1911	11.5	4.8	8.7	9.0	34.0
1912	11.3	4.2	8.9	8.1	32.5
1913	11.1	3.4	8.1	8.5	31.1
1914	12.8	3.9	9.0	8.2	33.9
1915	15.4	5.0	9.2	9.1	38.7
1916	13.7	6.4	10.8	14.2	45.1
1917	11.9	4.0	8.9	21.1	45.9
1918	12.4	2.8	7.8	22.8	45.8
1919	10.9	2.7	6.9	22.2	42.7
1920	9.9	3.1	7.7	14.5	35.2
1921	10.7	3.1	7.2	15.4	36.4

NOTE.—The statistics in this table are based upon the averages of the monthly returns in each year.

**Government and Other Savings Banks.**—There are two classes of Dominion Government Savings Banks in Canada, the Postal Savings Banks under the Post Office Department and the Dominion Government Savings Banks attached to the Department of Finance. The former, established under the Post Office Act of 1867, (31 Vict., c. 10) in order "to enlarge the facilities now available for the deposit of small savings, to make the Post Office available for that purpose, and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him, together with the interest due thereon." On Mar. 31, 1921, the number of offices authorized to transact business was 1,328, and the number of savings accounts was 88,563. Statistics of deposits are given in Table 59. The Government Savings Banks proper, under the management of the Finance Department, are established in the leading cities of Canada under the management of the Assistant Receiver General, and in other places in the provinces of Nova Scotia and New Brunswick, under managers appointed by the Governor in Council. Statistics of their deposits are given in Table 60, and for the two systems combined in Table 61.

**Other Savings Banks.**—The Montreal City and District Savings Bank, founded in 1846, and now operating under a charter granted in 1871, had over 100,000 depositors in 1920 with a capital on December 31, 1920, of \$1,498,570, reserve fund \$1,350,000, a balance on profit and loss account of \$323,449 (total \$3,172,019) and deposits of \$45,448,299. The Caisse d'Economie de Notre Dame de Quebec, founded in 1848 under the auspices of the St. Vincent de Paul Society, incorporated by act of the Canadian Legislature in 1855 and given a



Dominion charter by 34 Victoria, c. 7, had on May 31, 1921, deposits of \$11,148,182 with a total shareholders' investment of \$1,975,412. Historical statistics of savings bank deposits are given in Table 58.

The co-operative people's banks of Quebec province are also an important element in promoting thrift and assisting business in that province, the loans granted in 1920 being \$4,272,585 as compared with \$3,667,004 in 1919, \$2,623,096 in 1918 and \$2,306,172 in 1917.

**58.—Deposits with Government and Other Savings Banks, as at June 30, 1868-1936, and March 31, 1907-1922.**

Year.	Postal Savings Banks.	Dominion Government Savings Banks.	Other Savings Banks (Montreal City and District and Caisse d'Economie de Notre Dame de Quebec).	Total.	Amount per head of Population.
	\$	\$	\$	\$	\$ cts.
1868.....	204,589	1,483,219	3,369,799	5,057,607	1 50
1869.....	856,814	1,594,525	3,960,818	6,412,157	1 88
1870.....	1,588,849	1,822,570	5,369,103	8,780,522	2 54
1871.....	2,497,260	2,072,037	5,766,712	10,336,009	2 96
1872.....	3,096,500	2,154,233	5,557,126	10,807,859	2 99
1873.....	3,207,052	2,958,170	6,768,662	12,933,884	3 53
1874.....	3,204,965	4,005,296	6,811,009	14,021,270	3 67
1875.....	2,926,090	4,245,091	6,611,416	13,782,597	3 55
1876.....	2,740,952	4,303,166	6,519,229	13,563,347	3 43
1877.....	2,639,937	4,830,694	6,054,456	13,525,087	3 37
1878.....	2,754,484	5,742,529	5,631,172	14,128,185	3 46
1879.....	3,105,191	6,102,492	5,494,164	14,701,847	3 55
1880.....	3,945,669	7,107,287	6,681,025	17,733,981	4 21
1881.....	6,208,227	9,628,445	7,685,888	23,522,560	5 44
1882.....	9,473,661	12,295,001	8,668,435	30,427,096	6 94
1883.....	11,976,237	14,242,870	8,791,045	35,010,152	7 00
1884.....	13,245,553	15,971,983	8,851,142	38,068,679	8 49
1885.....	15,090,540	17,888,536	9,191,895	42,170,971	9 29
1886.....	17,159,372	20,014,442	9,177,132	46,350,946	10 10
1887.....	19,497,750	21,334,525	10,092,143	50,924,418	10 98
1888.....	20,689,033	20,682,025	10,475,292	51,846,350	11 06
1889.....	23,011,423	19,994,934	10,761,061	53,717,419	11 33
1890.....	21,990,653	19,021,812	10,908,987	51,921,452	10 83
1891.....	21,738,648	17,661,378	10,982,232	50,382,258	10 40
1892.....	22,298,402	17,231,146	12,236,100	51,765,648	10 59
1893.....	24,153,194	17,696,464	12,823,836	54,673,494	11 08
1894.....	25,257,868	17,778,144	12,919,578	55,955,599	11 23
1895.....	26,805,542	17,644,956	13,128,483	57,578,981	11 44
1896.....	28,932,930	17,866,389	14,459,833	61,259,152	12 04
1897.....	32,380,829	16,554,147	15,025,564	63,960,540	12 44
1898.....	34,480,938	15,630,181	15,482,100	65,593,219	12 62
1899.....	34,771,605	15,470,110	15,893,567	66,135,282	12 57
1900.....	37,507,456	15,642,267	17,425,472	68,575,195	12 90
1901.....	39,950,813	16,098,146	19,125,097	75,174,056	13 95
1902.....	42,320,209	16,117,779	20,366,888	78,798,876	14 44
1903.....	44,255,326	16,515,802	21,241,993	82,013,121	14 83
1904.....	45,419,706	16,738,744	23,063,143	85,221,593	15 21
1905.....	45,368,321	16,649,136	25,050,966	87,068,423	14 53
1906.....	45,736,488	16,174,134	27,399,194	89,309,816	14 47
1907 <sup>1</sup> .....	47,453,228	15,088,584	28,359,618	90,901,430	14 42
1908.....	47,564,284	15,016,871	28,927,248	91,508,403	14 10
1909.....	45,190,484	14,748,436	29,867,973	89,806,893	13 41
1910.....	43,586,357	14,677,872	32,239,620	90,503,849	13 08
1911.....	43,330,579	14,673,752	34,770,386	92,774,717	12 87
1912.....	43,563,764	14,655,564	39,526,755	97,746,083	13 27
1913.....	42,728,942	14,411,541	40,133,351	97,273,834	12 92
1914.....	41,591,286	13,976,162	39,110,439	94,677,887	12 31
1915.....	39,995,406	14,006,158	37,817,474	91,819,038	11 68
1916.....	40,008,418	13,519,855	40,405,037	93,933,310	11 69
1917.....	42,582,479	13,633,610	44,139,978	100,356,067	12 27
1918.....	41,283,479	12,177,283	42,000,543	95,461,305	11 46
1919.....	41,654,960	11,402,098	46,799,877	99,856,935	11 78
1920.....	31,605,594	10,729,218	53,118,053	95,452,865	11 06
1921.....	29,010,619	10,150,189	58,576,775	97,737,583	11 12
1922.....	24,026,270	9,624,163	58,292,920	91,943,353	10 25

<sup>1</sup> Nine months.

59.—Business of the Post Office Savings Banks, March 31, 1917-1921.

Items.	1917.	1918.	1919.	1920.	1921.
Savings banks.....No.	1,312	1,318	1,328	1,323	1,328
Deposits.....\$	11,974,434	11,791,967	12,593,190	10,003,068	6,631,685
Transferred from Government S.B. to Post Office S.B.....\$	—	91,649	174,143	184,303	589,247
Interest on deposit.....\$	1,209,528	1,241,578	1,203,559	1,056,545	883,842
Total cash and interest.....\$	13,180,962	13,128,194	13,975,892	11,243,916	8,104,774
Withdrawals.....\$	10,606,901	14,427,194	13,604,411	21,293,282	10,699,749
At credit of open accts.....\$	42,582,479	41,283,479	41,654,960	31,605,594	29,010,619
Open accounts.....No.	135,142	125,735	116,541	97,154	88,563

60.—Business of the Dominion Government Savings Banks, March 31, 1917-1921.

Items.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Deposits.....	2,135,601	2,048,469	2,344,918	2,378,600	2,103,873
Interest on deposits.....	395,447	382,151	340,378	319,800	294,349
Total cash and interest.....	2,531,048	2,430,620	2,685,296	2,698,400	2,398,222
Withdrawals.....	2,417,293	3,886,947	3,460,481	3,371,280	2,977,251
At credit of depositors.....	13,633,610	12,177,283	11,402,098	10,729,218	10,150,189

61.—Total Business of Post Office and Dominion Government Savings Banks, March 31, 1917-1921.

Items.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Deposits.....	14,110,035	13,932,085	15,112,251	12,565,971	9,324,805
Interest on deposits.....	1,601,975	1,626,729	1,548,937	1,376,345	1,178,291
Total cash and interest.....	15,712,010	15,558,814	16,661,188	13,942,316	10,502,996
Withdrawals.....	13,024,194	18,314,141	17,064,892	24,664,562	13,677,000
At credit of depositors.....	56,216,089	53,460,762	53,057,058	42,334,812	39,160,808

LOAN AND TRUST COMPANIES.

**Loan and Trust Companies.**—Up to and including the year 1913 tables were given in the Year Book of the assets and liabilities, with comparative figures for a series of years, of loan companies and building societies. These tables were taken from the "Annual Report of the Affairs of Building Societies, Loan and Trust Companies in the Dominion of Canada," as issued by the Department of Finance. The statistics in this Report were compiled by the Department of Finance partly from the statements required to be furnished under legislation of the Dominion Parliament and partly from returns voluntarily made by corporations operating under provincial charters. The laws relating to loan and trust companies incorporated by Acts of the Parliament of Canada were revised by the Loan and Trust Companies Acts of 1914 (4-5 Geo. V, cc. 40 and 55), and since the passing of these Acts the Annual Report issued by the Department of Finance up to and including the year 1913 has been replaced by

"Annual Statements of the Loan and Trust Companies incorporated by Acts of the Parliament of Canada." Tables 62 and 63 show therefore the liabilities and assets of the loan and trust companies as compiled from the statements furnished to the Department of Insurance. They relate to 14 loan and 16 trust companies, and do not include companies or societies operating under provincial charters. Under Chapters 14 and 21 of the Statutes of 1920 (10-11 Geo. V, chaps. 14 and 21) a systematic annual inspection of the affairs of these companies is being made by the Department of Insurance.

### 62.—Liabilities and Assets of Loan Companies, 1914-1921.

#### LIABILITIES.

Year.	Capital paid up in cash.	Reserve Fund.	Debentures			Deposits payable on demand or after notice.	Other liabilities.	Total liabilities.
			payable in Canada.	payable elsewhere.	Stock issued.			
	\$	\$	\$	\$	\$	\$	\$	\$
1914.....	19,238,512	9,374,363	6,688,124	22,745,770	1,296,480	8,104,072	3,140,770	70,588,091
1915.....	19,401,856	9,878,266	6,764,836	22,279,861	1,390,869	8,193,194	3,083,784	71,992,666
1916.....	19,673,934	10,319,176	6,889,946	20,101,111	1,447,205	8,987,720	3,453,207	70,872,297
1917.....	19,813,217	10,705,215	7,075,081	18,270,163	1,509,491	8,934,825	3,371,201	69,679,193
1918.....	19,945,858	10,938,193	7,442,982	17,767,685	1,543,566	7,802,539	4,554,401	69,995,224
1919.....	20,191,612	11,923,234	7,765,614	17,894,509	1,595,780	9,347,096	5,802,176	74,520,021
1920.....	24,062,521	13,442,364	16,982,032	18,451,051	—	15,257,840	2,217,449	90,413,261
1921.....	25,750,966	14,309,039	17,682,083	20,265,766	—	15,868,926	2,288,327	96,165,107

#### ASSETS.

Year.	Lent on mortgages and hypothecues.	Loans upon and invested in bonds, stocks, and other securities.	Cash on hand and in banks.	Interest due.	Other Assets.	Total Assets.
	\$	\$	\$	\$	\$	\$
1914.....	53,710,084	10,666,594	3,220,803	591,443	2,399,167	70,588,091
1915.....	52,807,357	10,880,850	3,093,004	679,966	2,631,489	71,992,666
1916.....	51,981,926	11,799,224	3,241,053	681,246	3,168,848	70,872,297
1917.....	49,722,872	12,124,736	3,478,220	751,475	3,608,920	69,676,223
1918.....	48,293,988	14,188,297	3,023,839	524,664	3,964,253	69,995,031
1919.....	47,309,298	19,420,695	2,838,636	261,810	4,689,582	74,520,021
1920.....	63,725,084	18,344,060	3,363,877	1,658	4,978,582	90,413,261
1921.....	67,320,461	16,842,515	4,568,953	2,722,260	5,244,620	96,698,809

### 63.—Liabilities and Assets of Trust Companies, 1914-1921.

#### LIABILITIES.

Year.	Liabilities to Shareholders.			Other liabilities.	Total liabilities in company funds to shareholders.	Liabilities to the Public.		Total liabilities to the public.
	Capital paid up in cash.	Reserve Fund.	Other liabilities to shareholders.			Guaranteed funds.	Estate trusts and agencies under administration.	
	\$	\$	\$	\$	\$	\$	\$	\$
1914.....	6,051,146	2,541,413	202,427	1,948,414	10,743,400	8,560,468	29,832,343	38,392,811
1915.....	5,307,128	1,159,479	233,738	606,005	7,306,350	9,727,099	31,062,934	40,730,033
1916.....	5,673,670	1,245,589	287,214	620,470	7,826,943	10,405,318	36,756,902	47,162,220
1917.....	5,297,130	1,275,789	352,153	731,220	7,656,292	11,149,958	38,141,389	49,291,347
1918.....	6,266,203	1,477,617	415,938	676,379	8,836,137	12,743,379	56,194,857	68,938,236
1919.....	7,356,474	1,643,464	391,625	616,378	10,007,941	12,704,672	52,084,047	64,788,719
1920.....	7,465,376	1,908,753	391,975	561,265	10,327,369	9,475,041	57,225,303	66,700,344
1921.....	7,532,777	1,746,579	167,303	499,264	9,945,923	8,559,326	79,252,639	87,811,965

**63.—Liabilities and Assets of Trust Companies, 1914-1921—concluded.****ASSETS—COMPANY FUNDS.**

Year	Loans				Governments, municipal and school securities owned.	Stocks.	Cash on hand and in banks.	Market value of real estate, government securities, etc., over book value.	All other assets belonging to the companies	Total assets of the companies.
	on real estate, first liens.	on real estate, second liens.	on stocks and securities.	on real estate.						
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1914..	5,189,797	113,095	557,625	—	787,400	—	179,928	879,039	3,033,756	10,740,640
1915..	3,972,520	102,395	647,524	—	876,760	—	172,448	5,181	1,529,522	7,306,350
1916..	3,906,986	544,747	374,392	—	1,116,110	—	266,964	32,231	1,585,513	7,826,943
1917..	3,993,484	297,387	253,781	—	1,145,815	—	173,130	3,331	1,789,364	7,656,292
1918..	3,933,962	101,784	294,472	—	1,839,000	—	724,689	5,865	1,936,365	8,836,137
1919..	4,432,455	557,171	496,769	—	2,170,618	—	706,763	8,392	1,635,773	10,007,941
1920..	4,736,064	—	512,800	701,564	2,500,942	349,294	576,125	—	847,463	10,224,252
1921..	4,755,061	—	413,488	513,082	2,400,913	253,784	603,618	—	1,298,290	10,238,236

**ASSETS—TRUST FUNDS**

Year.	Guaranteed Funds.						Estates, Trusts and Agency Funds. <sup>1</sup>
	First mortgages, and hypothèques upon improved freehold property.	Bonds and Debentures.	Stocks.	Cash in hand and in banks.	Other assets.	Total Guaranteed Funds.	
	\$	\$	\$	\$	\$	\$	\$
1914.....	13,238,642	2,420,545	—	870,994	13,184,047	29,734,228	—
1915.....	12,267,515	4,214,787	—	778,473	11,706,041	28,966,816	—
1916.....	9,273,771	4,841,833	—	2,661,481	13,400,107	30,177,192	—
1917.....	9,251,407	6,707,457	—	1,351,416	14,247,227	31,557,507	—
1918.....	9,314,279	9,833,060	—	2,027,618	15,428,747	36,603,704	—
1919.....	10,950,249	11,393,564	—	2,694,454	19,256,564	44,294,831	—
1920.....	4,247,183	2,437,106	329,801	843,832	941,588	8,809,510	64,895,196
1921.....	4,169,039	2,508,197	—	550,010	1,556,622	8,783,868	79,252,639

<sup>1</sup>For the years 1914 to 1919 the figures for this column are not distinguished in the official returns from the figures for guaranteed funds shown in the preceding columns.

**COMMERCIAL FAILURES.**

**Commercial Failures in Canada, 1921.**—According to Bradstreet's of January 7, 1922, the total number of Canadian failures reported during the calendar year 1921 was 2,358, with liabilities of \$48,678,095 in 1921, as against 966, with liabilities of \$20,808,053 in 1920. In number there was an increase in 1921 of 144·1 p.c. as compared with 1920, while the liabilities increased by over 133·9 p.c. Dun's Bulletin of the same date gives the total number of Canadian insolvencies in 1921 as 2,451, as compared with 1,078 in 1920, whilst liabilities reached in 1921 the total of \$73,299,111, as compared with \$26,494,301 in 1920. Tables 64 and 66 give the statistics from both authorities, those from Bradstreet's (Table 64) being classified by provinces for the calendar years 1920 and 1921 and those for Dun's Bulletin, including Newfoundland, being classified by branches of business for the calendar years 1919 to 1921 (Table 65) and by classes and provinces for the calendar year 1921 with totals for the years 1908 to 1920, including Newfoundland (Table 66). An analysis by cause of the failures for 1920 and 1921 is given in Table 67 (Bradstreet's).



**64.—Commercial Failures in Canada, by Provinces and Newfoundland, for the calendar years 1920 and 1921. [From Bradstreet's.]**

Provinces.	Number of Failures.		Assets.		Liabilities.	
	1920.	1921.	1920.	1921.	1920.	1921.
			\$	\$	\$	\$
Prince Edward Island.....	—	8	—	20,805	—	35,955
Nova Scotia.....	44	106	110,035	1,345,263	285,354	2,555,875
New Brunswick.....	12	50	30,050	410,647	55,267	918,202
Quebec.....	367	893	5,909,897	9,070,394	11,759,167	19,578,921
Ontario.....	226	569	1,947,907	5,010,172	4,068,370	11,453,043
Manitoba.....	95	245	882,572	1,470,955	1,639,712	4,112,813
Saskatchewan.....	106	210	505,054	1,564,588	937,873	2,393,003
Alberta.....	46	136	511,300	1,567,635	817,600	2,426,415
British Columbia.....	70	141	581,650	1,024,537	1,244,710	5,203,868
<b>Canada.....</b>	<b>966</b>	<b>2,358</b>	<b>10,478,465</b>	<b>21,484,996</b>	<b>20,808,053</b>	<b>48,678,095</b>
Newfoundland.....	13	35	999,292	1,845,863	1,331,522	2,405,063

**65.—Commercial Failures in Canada by Branches of Business, 1919-1921. [From Dun's Bulletin.]**

Classes.	1919.		1920.		1921.	
	Num-ber.	Liabilities.	Num-ber.	Liabilities.	Num-ber.	Liabilities.
		\$		\$		\$
<b>Manufacturers—</b>						
Iron and Foundries.....	3	1,804,800	3	115,011	11	1,264,578
Machinery and Tools.....	15	2,807,930	20	4,046,847	28	7,138,818
Woollens, Carpets, etc.....	—	—	—	—	7	124,104
Cotton, Hosiery, etc.....	3	153,000	—	—	3	926,743
Lumber, Carpenters.....	32	1,578,169	26	1,034,253	85	2,041,646
Clothing, Millinery.....	28	343,054	53	3,096,484	127	6,429,289
Hats, Gloves and Furs.....	5	51,500	10	170,834	21	705,049
Chemicals and Drugs.....	7	68,491	2	19,000	9	166,409
Paints and Oils.....	—	—	—	—	2	38,204
Printing and Engraving.....	9	514,900	7	499,900	14	113,154
Milling and Bakers.....	16	143,712	22	1,180,602	47	1,710,511
Leather, Shoes, etc.....	10	325,435	9	287,116	17	811,232
Liquors and Tobacco.....	5	106,725	5	294,000	12	467,514
Glass, Earthenware.....	5	160,878	2	9,658	4	93,800
All other.....	75	2,175,883	96	5,117,511	172	11,945,739
<b>Total Manufacturers.....</b>	<b>213</b>	<b>10,234,477</b>	<b>255</b>	<b>15,871,216</b>	<b>559</b>	<b>33,976,790</b>
<b>Traders—</b>						
General Stores.....	85	966,344	171	2,997,633	426	7,815,984
Groceries and Meats.....	179	1,363,485	259	1,634,916	427	4,093,626
Hotels, Restaurants.....	30	79,906	49	138,497	66	819,457
Liquors and Tobacco.....	16	25,802	13	34,812	33	813,884
Clothing, Furnishing.....	38	208,452	60	703,548	179	2,021,322
Dry Goods and Carpets.....	29	429,854	43	436,611	157	3,460,304
Shoes, Rubbers, and Trunks.....	25	244,990	31	279,912	84	1,589,683
Furniture, Crockery.....	7	74,146	8	77,311	18	217,875
Hardware, Stoves, and Tools.....	23	404,851	23	310,697	36	439,580
Chemicals and Drugs.....	4	36,710	7	32,500	18	143,417
Paints and Oils.....	—	—	—	—	5	64,067
Jewellery and Clocks.....	9	58,408	8	48,904	25	223,149
Books and Papers.....	3	13,810	4	12,100	24	181,726
Hats, Furs and Gloves.....	1	25,000	4	99,836	18	1,203,496
All other.....	45	543,870	91	897,228	223	6,798,999
<b>Total Traders.....</b>	<b>494</b>	<b>4,475,628</b>	<b>771</b>	<b>7,704,505</b>	<b>1,739</b>	<b>29,886,569</b>
<b>Agents and Brokers.....</b>	<b>48</b>	<b>1,546,154</b>	<b>52</b>	<b>2,918,580</b>	<b>153</b>	<b>9,435,752</b>
<b>Total.....</b>	<b>755</b>	<b>16,256,259</b>	<b>1,078</b>	<b>26,494,301</b>	<b>2,451</b>	<b>73,299,111</b>

NOTE.—The failures in Table 64 include those of Newfoundland.

66.—Commercial Failures in Canada, by Provinces and Classes, for 1921, with totals for 1908-1920. [From Dun's Review.]

Provinces.	Total Commercial.			Manufacturing.	
	Num-ber.	Assets.	Liabilities.	Num-ber.	Liabilities.
		\$	\$		\$
Prince Edward Island.....	7	26,300	79,888	—	—
Nova Scotia.....	116	1,300,511	3,290,508	23	626,827
New Brunswick.....	51	578,605	685,351	11	280,372
Quebec.....	1,015	18,567,364	29,206,412	258	11,873,661
Ontario.....	579	25,526,625	24,798,148	180	19,707,200
Manitoba.....	159	2,560,460	3,064,174	23	602,337
Saskatchewan.....	192	1,831,495	2,231,230	9	85,097
Alberta.....	135	1,731,378	1,646,243	13	41,700
British Columbia.....	125	2,991,749	3,945,186	38	658,096
<b>Total 1921.....</b>	<b>2,379</b>	<b>55,114,487</b>	<b>68,947,140</b>	<b>555</b>	<b>33,875,290</b>
Newfoundland.....	72	2,043,910	4,351,971	4	101,500
<b>Total 1920.....</b>	<b>1,078</b>	<b>18,516,516</b>	<b>26,494,301</b>	<b>255</b>	<b>15,871,216</b>
" 1919.....	755	10,741,441	16,256,259	213	10,234,477
" 1918.....	873	11,251,341	14,502,477	232	8,248,807
" 1917.....	1,097	13,051,900	18,241,465	261	7,455,094
" 1916.....	1,685	19,670,542	25,069,534	363	8,796,646
" 1915.....	2,661	39,526,358	41,162,321	655	13,877,414
" 1914.....	2,898	30,909,563	35,045,095	614	11,063,191
" 1913.....	1,719	12,658,979	16,979,406	452	6,792,763
" 1912.....	1,357	8,783,409	12,316,936	323	4,556,615
" 1911.....	1,332	9,964,604	13,491,196	321	4,760,016
" 1910.....	1,262	11,013,396	14,514,650	292	7,030,227
" 1909.....	1,442	10,318,511	12,982,800	354	3,933,938
" 1908.....	1,640	12,008,113	14,931,790	426	5,967,498

Provinces.	Trading.		Other Commercial.		Banking.	
	Num-ber.	Liabilities.	Num-ber.	Liabilities.	Num-ber.	Liabilities.
		\$		\$		\$
Prince Edward Island.....	7	79,888	—	—	—	—
Nova Scotia.....	86	2,388,431	7	275,250	—	—
New Brunswick.....	36	380,979	4	24,000	—	—
Quebec.....	701	11,530,411	56	5,802,340	1	45,233
Ontario.....	374	4,633,548	25	457,400	—	—
Manitoba.....	115	2,257,855	21	203,982	—	—
Saskatchewan.....	169	2,082,485	14	63,648	—	—
Alberta.....	111	1,363,749	11	240,794	—	—
British Columbia.....	75	933,934	12	2,353,156	—	—
<b>Total 1921.....</b>	<b>1,674</b>	<b>25,651,280</b>	<b>150</b>	<b>9,420,570</b>	<b>1</b>	<b>45,233</b>
Newfoundland.....	65	4,235,289	3	15,182	—	—
<b>Total 1920.....</b>	<b>771</b>	<b>7,704,505</b>	<b>52</b>	<b>2,918,580</b>	<b>—</b>	<b>—</b>
" 1919.....	494	4,475,628	48	1,546,154	—	—
" 1918.....	590	5,142,397	51	1,111,273	—	—
" 1917.....	777	8,417,239	59	2,369,132	—	—
" 1916.....	1,237	12,290,368	85	3,982,520	—	—
" 1915.....	1,888	21,696,890	118	5,558,017	1	150,000
" 1914.....	2,164	18,677,935	120	5,303,968	1	250,000
" 1913.....	1,216	8,651,419	51	1,505,224	1	125,000
" 1912.....	975	6,906,665	59	853,656	—	—
" 1911.....	986	7,606,891	5	1,124,289	1	71,194
" 1910.....	947	6,943,579	23	540,850	2	2,546,871
" 1909.....	1,059	7,867,287	29	1,181,575	—	—
" 1908.....	1,171	8,242,436	43	712,856	2	2,137,242

NOTE.—Newfoundland included in totals 1908-1920.

**67.—Causes of Failures in Canada and the United States by Numbers and Percentages, years ended December 31, 1920 and 1921.** [From Bradstreet's.]

IN CANADA (including Newfoundland and St. Pierre-Miquelon).

Failures due to	Number.		Assets.		Liabilities.	
	1920.	1921.	1920.	1921.	1920.	1921.
	No.	No.	\$	\$	\$	\$
Incompetence.....	204	555	1,144,019	3,181,669	2,205,521	7,559,015
Inexperience.....	79	97	389,363	438,569	891,863	863,860
Lack of capital.....	334	814	5,643,600	10,233,610	11,682,434	23,134,379
Unwise credits.....	23	42	97,000	281,115	226,700	678,738
Failures of others.....	13	33	60,700	834,046	189,300	1,635,091
Extravagance.....	6	8	8,020	34,614	30,199	66,575
Neglect.....	28	40	73,060	143,158	172,213	321,704
Competition.....	8	9	58,000	103,157	140,050	196,356
Specific conditions.....	182	613	3,478,121	7,017,587	4,945,136	12,737,007
Speculation.....	5	18	145,040	402,580	251,455	1,231,708
Fraud.....	97	166	380,834	733,136	1,404,704	2,639,646
<b>Total.....</b>	<b>979</b>	<b>2,395</b>	<b>11,477,757</b>	<b>23,408,241</b>	<b>22,139,575</b>	<b>51,064,079</b>

IN UNITED STATES.

Incompetence.....	2,753	6,404	32,455,312	103,548,671	56,522,786	167,975,466
Inexperience.....	556	1,142	7,725,694	11,391,871	14,268,745	21,851,478
Lack of capital.....	2,735	5,855	60,396,251	77,166,433	113,612,638	165,536,601
Unwise credits.....	131	230	12,625,729	22,938,682	15,578,242	29,329,791
Failures of others.....	105	226	2,389,931	8,183,145	3,476,379	13,957,791
Extravagance.....	105	82	642,160	1,138,640	1,268,384	2,388,411
Neglect.....	110	257	1,057,127	1,379,815	2,021,429	3,014,239
Competition.....	112	183	728,628	1,171,511	1,266,060	2,082,472
Specific conditions.....	1,221	4,638	144,002,263	205,056,079	194,121,666	317,863,633
Speculation.....	43	66	4,761,745	5,413,682	8,119,845	8,593,432
Fraud.....	592	931	7,363,014	9,210,059	16,115,341	23,184,371
<b>Total.....</b>	<b>8,463</b>	<b>20,014</b>	<b>274,147,854</b>	<b>446,598,588</b>	<b>426,371,515</b>	<b>755,777,685</b>

PERCENTAGES OF NUMBER OF FAILURES AND LIABILITIES, CLASSIFIED BY CAUSE.

Failures due to	Canada per cent.				United States per cent.			
	Number.		Liabilities.		Number.		Liabilities.	
	1920.	1921.	1920.	1921.	1920.	1921.	1920.	1921.
Incompetence.....	20.8	23.2	10.0	14.8	32.5	32.0	13.3	22.2
Inexperience.....	8.1	4.0	4.0	1.7	6.6	5.7	3.3	2.9
Lack of capital.....	34.1	34.0	52.8	45.3	32.3	29.3	26.6	21.9
Unwise credits.....	2.4	1.8	1.0	1.3	1.6	1.1	3.7	3.9
Failures of others.....	1.3	1.4	0.9	3.2	1.2	1.1	0.8	1.8
Extravagance.....	0.6	0.3	0.2	0.1	1.2	0.4	0.3	0.3
Neglect.....	2.9	1.7	0.8	0.6	1.3	1.3	0.5	0.4
Competition.....	0.8	0.4	0.6	0.4	1.3	0.9	0.3	0.3
Specific conditions.....	18.6	25.6	22.3	25.0	14.4	23.2	45.5	42.1
Speculation.....	0.5	0.7	1.1	2.4	0.6	0.3	1.9	1.1
Fraud.....	9.9	6.9	6.3	5.2	7.0	4.7	3.8	3.1

**Analysis of Commercial Failures.**—In Tables 68 and 69 Bradstreet's and Dun's records of commercial failures are analysed by Kemmerer's method. First the total of concerns failing is stated as a percentage of those in business and this percentage is then stated as an index number with 1900 as a base year. Then the assets and liabilities are stated, with the average liabilities per failure, since failures are more disastrous in proportion as the liabilities are larger. Next, the average liabilities per failure are stated as an index number, with 1900 as the base year. The percentage of liabilities to assets is also given, and finally the index number indicating the proportion of failures to the number of concerns in business and the index number indicating the size of the liabilities are averaged, and the result is given as the barometer of business depression. This number reversed, i.e., subtracted from 200, is given as a barometer of business confidence. The records of Bradstreet and Dun are not on the same basis, but the general tendency of the two records is the same.

63.—Commercial Failures and Business Confidence in Canada, 1900-1921. (Bradstreet's)

Year.	Number of Concerns.				Assets.		Liabilities.			Index Number of Business.	
	Doing Business.	Failing.	Proportion Failing.		Total.	Average.		Percent- age of liabilities to assets.	Depres- sion.	Confi- dence.	
			Percentage.	Index No. (1900=100.)		Amount.	Index No. (1900=100.)				
											No.
	No.	No.	p.c.	p.c.	\$	\$	p.c.	p.c.	p.c.	p.c.	
1900.	100,618	1,337	1.32	100.0	4,246,693	10,785,601	8,067	190.0	253	100.0	
1901.	103,421	1,379	1.33	100.7	5,264,551	11,783,737	8,546	105.8	223	96.8	
1902.	106,099	1,095	1.03	78.0	3,602,542	8,546,365	7,804	96.7	237	103.2	
1903.	108,215	958	0.88	66.6	3,870,605	8,372,011	8,739	108.3	216	112.7	
1904.	110,615	1,175	1.06	80.3	4,137,418	10,019,311	8,527	105.7	242	108.6	
1905.	114,335	1,430	1.25	94.7	6,584,191	13,879,700	9,706	120.3	210	107.0	
1906.	112,362	1,230	1.10	83.3	4,305,076	9,450,093	7,627	94.5	219	92.5	
1907.	116,202	1,365	1.17	86.6	5,276,698	11,735,272	8,596	106.5	222	88.9	
1908.	118,875	1,715	1.44	109.1	7,770,207	17,582,304	10,252	127.1	226	96.5	
1909.	123,232	1,588	1.28	96.9	6,195,515	12,811,184	8,067	100.0	206	118.1	
1910.	128,881	1,469	1.14	86.3	7,075,347	15,712,586	10,696	132.6	222	81.9	
1911.	130,446	1,401	1.07	81.0	6,420,331	13,086,946	9,341	115.7	203	101.6	
1912.	142,583	1,312	0.92	69.7	5,611,675	12,355,282	9,417	116.7	220	98.3	
1913.	149,852	1,827	1.21	91.6	8,140,990	16,650,490	9,113	112.9	204	106.8	
1914.	155,849	2,886	1.85	140.1	13,507,536	30,693,658	10,635	131.8	227	97.8	
1915.	156,008	2,621	1.68	127.3	14,227,192	32,134,312	12,260	152.0	226	135.9	
1916.	156,535	1,772	1.13	85.6	6,349,078	15,952,684	9,003	111.6	226	64.1	
1917.	153,079	1,109	0.72	54.6	6,207,512	13,616,822	12,278	152.2	251	60.4	
1918.	152,974	814	0.53	40.1	5,354,727	12,413,536	15,250	189.0	220	98.6	
1919.	156,187	625	0.40	30.3	5,080,534	10,095,232	16,152	209.2	232	114.6	
1920.	164,049	966	0.59	44.7	10,478,465	20,808,053	21,540	267.0	198	85.4	
1921.	171,415	2,358	1.38	104.5	21,484,996	48,678,095	20,644	255.9	199	115.2	
									227	155.8	
										44.2	
										19.8	

Note.—Newfoundland included 1900, 1901.

NOTE.—Newfoundland included 1900-1913 inclusive.



69.—Commercial Failures and Business Confidence in Canada, 1909-1921. (Dun.)

Year.	Number of Concerns.				Assets.		Liabilities.		Index Number of Business.			
	Doing Business.	Failing.	Proportion Failing.		\$	\$	Total.	Average.		Percent- age of liabilities to assets.	Depres- sion.	Confi- dence.
			Percentage.	Index No. (1900 = 100 )				Amount.	Index No. (1900 = 100.)			
No.	No.	p.c.	p.c.	\$	\$	\$	p.c.	p.c.	p.c.			
1900.....	95,772	1,355	1.41	100.0	8,202,898	11,613,208	8,570	100.0	142	100.0	100.0	
1901.....	96,961	1,341	1.38	97.8	7,686,823	10,811,671	8,062	94.1	141	95.9	104.1	
1902.....	93,890	1,161	1.17	82.9	7,772,418	10,934,777	9,031	115.9	141	99.4	100.6	
1903.....	95,029	1,978	1.03	73.0	4,872,422	7,552,724	7,723	90.1	155	81.5	118.5	
1904.....	96,822	1,246	1.29	91.5	8,555,875	11,394,117	9,114	106.7	133	99.1	100.9	
1905.....	101,246	1,347	1.33	94.3	6,822,005	9,854,659	7,316	85.4	144	89.8	110.2	
1906.....	104,576	1,184	1.13	80.1	6,409,052	9,085,773	7,673	89.5	139	84.8	115.2	
1907.....	108,160	1,278	1.17	82.9	9,443,227	13,221,250	10,345	120.7	140	101.8	98.2	
1908.....	113,551	1,640	1.44	102.1	12,008,113	14,932,700	9,105	106.2	124	104.2	95.8	
1909.....	117,309	1,442	1.23	87.2	10,318,511	12,982,800	9,003	105.0	126	96.1	103.9	
1910.....	119,764	1,262	1.05	74.4	11,013,336	14,514,650	11,501	134.2	131	104.3	95.7	
1911.....	129,917	1,332	1.03	73.0	9,964,404	13,491,166	10,128	118.2	135	95.6	104.4	
1912.....	132,469	1,357	1.02	72.3	8,783,409	12,316,386	9,076	105.9	140	89.1	110.9	
1913.....	141,135	1,719	1.22	86.5	12,658,979	16,979,406	9,877	115.2	134	100.8	99.2	
1914.....	149,989	2,892	1.93	136.9	30,888,363	34,996,694	12,101	141.2	113	139.0	61.0	
1915.....	150,378	2,652	1.76	124.8	39,243,658	40,676,621	15,338	179.0	104	151.9	48.1	
1916.....	147,575	1,677	1.14	80.8	19,640,703	24,985,908	14,899	173.9	127	127.3	72.7	
1917.....	142,431	1,088	0.76	53.9	12,994,179	18,108,347	16,643	194.2	139	124.6	76.0	
1918.....	141,709	873	0.62	43.9	11,246,341	14,502,477	16,612	193.8	129	118.8	81.2	
1919.....	142,919	751	0.53	37.6	10,731,541	16,224,259	21,603	252.1	151	144.8	55.2	
1920.....	151,203	1,034	0.63	48.2	17,501,332	24,719,111	23,906	278.9	141	163.5	36.5	
1921.....	154,608	2,379	1.54	109.2	55,114,487	68,947,140	28,982	338.2	125	223.7	--23.7	

## GOVERNMENT ANNUITIES.

During the early years of the 20th century, there took place throughout the civilized world a distinct movement in favour of ameliorating the living conditions of the less well off members of society. One form which this movement took in the United Kingdom was that of old age pensions granted by the State as a free gift to its poorer citizens, whose earnings were very generally insufficient to permit of a margin of saving. In Canada, where wages were higher and a margin of saving consequently existed, the movement took the form of providing through the establishment of Government annuities, an absolutely safe investment for such savings, which had only too often been lost through the inexperience of their owners, leaving the latter a burden upon the charity of relatives or of the public.

Under the Government Annuities Act, 1908 (7-8 Edw. VII, c. 5), as amended by the Act of 1920, His Majesty the King, represented by the Minister (at present the Postmaster General), may sell to persons domiciled or resident in Canada over the age of five years immediate or deferred annuities of not less than \$50 nor more than \$5,000 (1) for the life of the annuitant; (2) for a term of years certain, not exceeding twenty years, or for the life of the annuitant, whichever period shall be the longer; and (3) an immediate or deferred annuity to any two persons domiciled in Canada during their joint lives, and with or without continuation to the survivor. The property and interest of any annuitant in any contract for an annuity is neither transferable nor attachable. The purchaser may contract that, in the event of the death of the annuitant before the date fixed for the annuity to begin, all money paid shall be refunded to the purchaser or his legal representatives with interest at the rate of 4 p.c., compounded yearly.

Statistics of the annuities in force on March 31, 1921, are given in Tables 70-71. From September 1, 1908, to March 31, 1921, 5,031 annuities have been issued, of which 356 have been cancelled on account of death, leaving on March 31, 1921, 1,068 immediate annuities and 3,605 deferred annuities, a total of 4,675 contracts in force. The total value of these annuities on that date was \$1,134,779.80, and the amount received for annuities purchased was \$4,912,145.67.

## 70.—Government Annuities Fund Statement, March 31, 1921.

ASSETS.	
Fund on March 31, 1920.....	\$ 3,897,711 41
Receipts, 1920-21, less payments.....	468,921 91
Fund on March 31, 1921.....	\$ 4,366,633 32
LIABILITIES.	
Net present value of all outstanding contracts.....	\$ 4,366,633 32
RECEIPTS.	
For Immediate Annuities.....	\$ 326,071 61
For Deferred Annuities.....	207,060 64
Amount transferred by Government to maintain reserve.....	221,244 65
<b>Total Receipts.....</b>	<b>\$ 754,376 90</b>
PAYMENTS.	
Annuities paid under Immediate Contracts.....	\$ 279,062 06
Return of premiums under Plan "A" Contracts.....	5,061 13
Return of purchase money.....	1,208 24
Return of interest.....	123 56
Balance March 31, 1921.....	468,921 91
<b>Total.....</b>	<b>754,376 90</b>

**71.—Valuation on March 31st, 1921, of Annuity Contracts issued pursuant to the Government Annuities Act, 1908.**

Description of Contract.	Number.	Amount of Annuities.	Total value on March 31st, 1921, of Annuities Purchased.
		\$	\$
1—Immediate Annuities.....	677	201,073 17	1,553,278 00
2—Guaranteed Annuities.....	286	66,189 55	555,753 00
3—Last Survivor Annuities.....	105	31,906 00	300,770 00
4—Deferred "A" Annuities.....	1,157	252,214 12	613,634 07
5—Deferred "A" Guaranteed Annuities.....	1,935	426,661 98	730,471 49
6—Deferred "A" Last Survivor Annuities.....	39	14,825 12	70,336 78
7—Deferred "B" Last Survivor Annuities.....	14	4,941 88	35,434 72
8—Deferred "B" Annuities.....	460	136,967 98	476,950 26
<b>Totals.....</b>	<b>4,673</b>	<b>1,134,779 80</b>	<b>4,366,633 32</b>

**INSURANCE.**

Insurance companies which transact business throughout the Dominion of Canada, are licensed by the Dominion Government under Acts administered by the Department of Insurance, under the Minister of Finance, while other insurance companies, doing business only in one province, or, by arrangement, in more provinces than one, are licensed by Provincial Governments. The statistics here published are in the main those of companies doing business under license from the Dominion Government and are divided into three classes relating to (1) insurance against fire, (2) life insurance, and (3) insurance of a miscellaneous character, covering risks of accident, guarantee, employers' liability, sickness, burglary, hail, steam boilers, tornado, weather, inland transportation, automobiles, sprinkler leakage, live stock and title. These statistics refer in all cases to the calendar year and are compiled from the Report of the Insurance Department.

Since 1915 the Department of Insurance has endeavoured to collect from the available sources the statistics of the business transacted by companies holding licenses from the Provincial Governments of Canada, or permitted by the laws of the provinces to transact business without a license. The business of the provincial licensees is divisible into three classes (1) business transacted by provincially incorporated companies within the province by which they are incorporated, (2) business transacted by provincially incorporated companies in provinces other than those by which they are incorporated, and (3) business transacted by British and foreign companies licensed by the Provincial Governments. Further, under section 129 of the Insurance Act of 1917, (7-8 Geo. V, c. 29), fire insurance of property in Canada may be effected, under specified conditions, with companies or associations outside of Canada which are not licensed to transact insurance business in Canada.

**Fire Insurance.**

Fire Insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the sea ports and operated by local merchants. The oldest existing agency of a British company is that of the Phoenix Fire Office of London, now the Phoenix Assurance Co., Ltd., which first commenced business in Montreal in 1804. On account of the growth of the insurance business of these early British companies, branch offices were established and managers were appointed, charged with directing the companies' affairs throughout Canada.

The Halifax Fire Insurance Co. is the first purely Canadian Company of which any record is obtainable. Founded in 1809 as the Nova Scotia Fire Association, it was chartered in 1819 and operated in the province of Nova Scotia until 1919, when it was granted a Dominion license. Among the other pioneer fire insurance companies still in operation, mention may be made of the following: The Quebec Fire Assurance Co., which commenced business in 1818 and which was largely confined in ownership and operations to Quebec province; the British America Assurance Co., incorporated in 1833, the oldest company in Ontario; the Western Assurance Co., organized in 1851 and after a rapid and steady growth one of the largest companies of its kind on the continent; and two American companies, the Aetna Insurance Co., of Hartford, Conn., and the Hartford Fire Insurance Co., which commenced business in Canada in 1821 and 1836 respectively.

A company desirous of carrying on business throughout Canada must obtain a license from the Dominion Government. If it proposes restricting its operations to one particular province, a license may be had from that province, and it may transact its business within such limits without regard to any general laws of the Dominion relating to insurance. In 1875 an Insurance Department was created as a branch of the Finance Department at Ottawa, under the supervision of an officer known as the "Superintendent of Insurance", whose duties are to see that the laws enacted from time to time by the Canadian Parliament are duly observed by the companies. Some important requirements under these laws are: (1) a deposit of \$50,000 of approved securities with the Government; (2) the appointment of a chief agent with power of attorney from the company; (3) the filing of a statement showing the financial position of the company at the time of its application for a license, and subsequent annual statements of its business. In addition, books of record must be kept at its chief office and be open to the inspection of government officers whose practice is to examine them annually.

The report of the Superintendent of Insurance for the year ended December 31, 1920, shows that at that date there were 152 fire insurance companies doing business in Canada, of which 43 were Canadian, 46 were British and 63 were foreign companies, whereas in 1875, the first year for which authentic records were collected by the Insurance Department, 27 companies operated in Canada, 11 Canadian, 13 British and 3 American. The proportionate increase in the number



of British and foreign companies from 59 to 72 per cent of the total number is a very marked point of difference between the fire and life insurance businesses in Canada, the latter being carried on very largely by Canadian companies.

The growth of business as shown by the amount of business in force and premiums received yearly has been a steady one, the year 1920 showing a specially large increase (26.31 p.c.). A corresponding decline in the rate of losses paid to premiums received may be noticed, the figures indicating that the companies suffered particularly heavy losses in 1877 and 1904, owing to the great fires in St. John and Toronto respectively.

Although in its early days the Dominion did not prove a very lucrative field for fire insurance companies, of late the great advance in building construction and the wide use of improved fire appliances and safety devices materially reduce the danger of serious conflagrations and place the risks assumed by companies in Canada on an equality with those of other countries.

A feature of the fire insurance business during 1920, besides the unusual increase in premiums received, is the continued increase in the number of companies licensed which are operating on the mutual or reciprocal plan. These companies, in which all profits or losses are directly received or paid by the policy holders, are making themselves felt as competitive factors in the fire insurance business.

**Statistics of Fire Insurance.**—The business of fire insurance was carried on in Canada in 1920 by 152 companies licensed by the Dominion Government, as compared with 134 companies in the preceding year. Of these companies, 43 were Canadian, 46 British and 63 foreign. The gross amount of fire insurance policies, new and renewed, taken during the year 1920, was \$6,790,670,610, as compared with \$5,423,569,961 in the preceding year. The net cash received for premiums was \$50,527,937, and the net cash paid for losses was \$21,954,283, or 43.45 p.c. of the premiums. The net amount in force with Dominion companies on December 31, 1920, was \$5,969,872,278. The net amount in force with provincial companies on the same date was \$1,054,105,011, making a grand total of \$7,023,977,289 in force at the end of 1920. In addition, policies amounting to \$483,758,441 were effected by companies, associations or underwriters not licensed to transact business in Canada.

Historical statistics showing the growth of fire insurance with Dominion companies are given in Tables 73 to 75, while Table 72 contains the statistics of the business transacted by Canadian, British and foreign companies, respectively, during the year 1920. Tables 76, 77 and 78, furnish statistics of assets, liabilities and cash income and expenditure of British, Canadian and foreign companies doing fire insurance, or fire insurance and other classes of insurance, in Canada for the last five years. The net premiums written and net losses incurred are given by provinces in Table 79. Finally, the complete statistics of Dominion and Provincial fire insurance are supplied in Table 80 and the amount of insurance effected with unlicensed companies and associations is given in Table 81, classified by companies, description of property insured, and province in which such property is situated.

## 72.—Fire Insurance Business transacted in Canada, 1920.

Companies.	Gross amount of risks taken during year.	Premiums charged thereon.	Rate of pre-miums per cent of risks.	Net cash received for premiums.	Net cash paid for losses.	Per-cent- age of losses paid to pre-miums re-ceived.
	\$	\$	p.c.	\$	\$	p.c.
<b>Canadian Companies—</b>						
Acadia Fire.....	39,463,850	533,234	1.35	230,141	99,672	43.31
Antigonish Farmers.....	397,850	3,326	0.84	3,326	1,170	35.18
Beaver Fire.....	9,118,063	123,683	1.36	34,760	7,080	20.58
British America.....	140,517,056	1,428,981	1.02	866,081	359,282	42.47
British Colonial.....	37,332,623	521,891	1.40	222,950	119,324	53.52
British Northwestern.....	34,238,468	315,879	0.92	153,956	52,726	33.36
Canada Accident and Fire.....	31,077,794	338,575	1.09	120,248	51,098	42.40
Canada National.....	26,364,244	388,142	1.28	204,988	61,282	29.90
Canada Security.....	26,297,974	233,478	0.89	68,887	28,820	41.55
Canadian Fire.....	54,474,036	759,618	1.39	368,485	117,476	31.88
Canadian Indemnity.....	13,745,270	198,716	1.45	116,107	28,437	24.49
Canadian Lumbermen's.....	1,818,354	43,043	2.37	2,503	none.	—
Canadian Surety.....	none.	none.	—	none.	none.	—
Cumberland Farmers.....	190,650	3,813	2.00	1,906	1,238	64.94
Dominion Fire.....	64,859,228	811,944	1.25	436,154	182,430	41.83
Dominion of Canada Guarantee and Accident.....	12,552,463	135,486	1.08	78,343	23,627	30.16
Fire Insurance Co. of Canada.....	49,906,578	470,276	0.94	196,045	94,751	45.08
General Accident of Canada.....	14,145,155	136,935	0.97	48,036	16,960	35.31
Globe Indemnity.....	45,337,106	466,178	1.03	193,181	64,054	33.13
Grain Insurance.....	65,279,297	212,106	0.32	201,490	29,002	14.39
Guardian Insurance Co. of Canada.....	21,376,221	250,183	1.17	62,729	24,480	44.84
Halifax Fire.....	3,072,465	51,674	1.68	30,760	13,201	42.92
Hudson Bay.....	32,654,549	430,766	1.32	256,431	88,850	39.09
Imperial Guarantee and Accident.....	none.	none.	—	none.	none.	—
Imperial Underwriters.....	38,826,703	341,888	0.88	150,011	67,554	45.02
Kings Mutual.....	1,793,825	18,146	2.60	21,002	4,232	20.15
Liverpool Manitoba.....	49,908,233	573,553	1.15	313,849	96,659	30.80
London and Lancashire Guarantees and Accident.....	none.	none.	—	none.	none.	—
London Mutual.....	106,481,592	1,036,681	0.97	568,873	255,096	44.84
Mercantile.....	42,385,625	411,114	0.97	360,788	154,031	42.69
Mount Royal.....	107,314,248	1,265,924	1.18	629,140	277,189	44.06
Mutual Fire.....	959,061	21,547	2.25	20,253	8,630	42.61
North American Accident.....	none.	none.	—	none.	none.	—
North Empire.....	36,516,702	468,370	1.28	171,039	96,637	58.32
North West.....	25,233,226	301,286	1.19	163,833	63,167	38.56
Occidental.....	40,541,442	523,800	1.29	247,729	92,207	37.22
Pacific Coast.....	29,161,442	324,141	1.11	152,675	54,276	35.55
Pacific Marine.....	1,329,687	21,418	1.61	8,642	1,106	12.26
Pictou County Farmers.....	569,400	4,365	0.77	4,365	2,761	63.25
Quebec.....	113,173,003	443,421	0.39	376,857	178,863	47.46
Reliance.....	165,606	689	0.41	487	none.	—
Scottish Canadian.....	none.	none.	—	none.	none.	—
Western.....	182,404,172	1,996,929	1.09	916,404	380,942	41.52
<b>Totals</b>	<b>1,500,412,316</b>	<b>15,611,199</b>	<b>1.04</b>	<b>8,003,457</b>	<b>3,198,304</b>	<b>39.97</b>
<b>British Companies—</b>						
Alliance.....	50,118,433	486,079	0.97	428,771	190,882	44.52
Atlas.....	74,460,508	904,538	1.21	751,263	264,202	35.17
British Crown.....	64,471,701	774,918	1.20	540,049	296,636	54.93
British General.....	21,432,086	179,648	0.84	107,560	29,152	27.10
British Traders.....	28,492,549	349,371	1.23	270,720	128,955	45.79
Caledonian.....	67,809,631	720,830	1.06	523,646	213,115	40.70
Car and General.....	67,350,298	254,927	0.38	140,339	45,411	32.36
Century.....	36,492,455	423,737	1.16	291,023	118,632	40.76
China.....	1,039,497	17,792	1.71	9,936	554	5.58
Commercial Union.....	151,691,924	1,515,838	1.00	1,183,676	582,640	49.22
Eagle Star and British Dominions.....	90,345,576	644,037	0.71	451,124	186,801	41.40
Employers' Liability.....	103,766,446	1,027,644	0.99	833,218	401,723	48.21
Essex and Suffolk.....	10,083,869	115,449	1.14	49,393	4,377	8.86
General Accident Fire.....	62,280,274	662,966	1.06	581,523	273,128	46.97
Guardian Assurance.....	183,017,498	2,091,108	1.14	1,753,854	740,270	42.21
Law, Union and Rock.....	44,581,203	426,401	0.96	339,603	117,766	34.68

## 72.—Fire Insurance Business transacted in Canada, 1920.—con.

Companies.	Gross amount of risks taken during year.	Premiums charged thereon.	Rate of premiums per cent of risks.	Net cash received for premiums.	Net cash paid for losses.	Percentage of losses paid to premiums received.
	\$	\$	p.c.	\$	\$	p.c.
<b>British Companies—concluded—</b>						
Liverpool and London and Globe	189,568,900	2,026,150	1.07	1,646,961	735,060	44.63
London Guarantee.....	84,905,674	1,036,738	1.22	859,995	531,590	61.85
London and Lancashire.....	135,880,497	1,392,342	1.02	1,107,974	549,922	49.63
London Assurance.....	71,109,766	722,563	1.03	621,333	217,477	35.00
Marine.....	none	none	—	none	none	—
Merchants' Marine.....	none	none	—	none	none	—
Motor Union.....	none	none	—	none	none	—
National Benefit.....	7,619,429	91,502	1.20	52,323	18,403	35.17
National Prov. Plate Glass.....	4,558,233	33,211	0.73	17,414	62	0.35
North British and Mercantile.....	141,795,180	1,532,504	1.08	1,252,238	636,983	50.87
Northern Assurance.....	124,166,090	1,419,000	1.14	1,214,345	577,075	47.52
Norwich Union Fire.....	116,691,873	1,341,343	1.15	1,179,151	485,157	41.14
Ocean, Accident and Guarantee.....	44,077,867	481,969	1.09	367,199	171,549	46.72
Palatine.....	56,268,871	598,731	1.06	487,716	246,558	50.55
Phoenix of London.....	143,616,566	1,771,918	1.23	1,296,599	368,281	28.40
Provincial.....	18,587,535	179,361	0.96	152,511	54,635	35.82
Queensland.....	32,213,567	342,568	1.06	280,656	105,549	37.61
Railway Passengers.....	none	none	—	none	none	—
Royal Exchange.....	108,060,767	972,622	0.90	804,617	351,553	43.69
Royal Insurance.....	236,836,477	2,629,154	1.11	2,178,382	856,799	39.33
Royal Scottish.....	22,612,738	224,736	0.99	173,358	58,486	33.74
Scottish Metropolitan.....	13,694,738	154,991	1.13	119,644	24,366	20.37
Scottish Union.....	57,827,488	564,466	0.98	464,627	175,581	37.79
Sun Insurance.....	100,220,905	1,066,070	1.06	852,357	364,632	42.78
Traders and General.....	6,933,056	83,591	1.21	47,903	4,656	9.72
Union Assurance Society.....	95,316,697	1,019,660	1.07	779,075	305,993	39.28
Union of Canton.....	66,988,619	719,323	1.07	547,274	255,081	46.61
Union Marine.....	none	none	—	none	none	—
Yangtze.....	1,304,602	22,012	1.69	15,067	444	2.95
Yorkshire.....	53,458,618	676,133	1.26	558,235	318,642	57.08
<b>Totals.....</b>	<b>2,991,753,701</b>	<b>31,697,941</b>	<b>1.06</b>	<b>25,332,652</b>	<b>11,004,078</b>	<b>43.44</b>
<b>Foreign Companies—</b>						
Aetna.....	71,298,757	725,843	1.02	569,475	224,576	39.44
Agricultural.....	2,269,806	39,640	1.75	31,558	3,568	11.31
Alliance Insurance.....	35,040,741	295,212	0.84	205,386	106,070	51.64
American Alliance.....	1,710,787	31,887	1.86	6,389	952	14.89
American Central.....	32,111,309	315,125	0.98	256,985	83,459	32.43
American Equitable.....	11,245,576	102,023	0.91	80,689	35,510	44.01
American Insurance.....	7,571,841	94,882	1.25	63,489	22,871	36.02
American Lloyds.....	4,997,718	19,741	0.39	17,534	6,652	37.94
Boston.....	14,314,809	131,302	0.92	122,265	68,795	56.27
Caledonian-American.....	6,487,066	70,007	1.08	18,047	244	1.35
California.....	18,004,072	152,385	0.85	107,106	21,359	19.94
Citizens of Missouri.....	3,261,429	53,773	1.65	41,005	9,816	23.94
Columbia.....	10,204,051	109,748	1.08	43,095	4,104	9.52
Commercial Union of N.Y.....	1,059,791	17,399	1.64	7,801	1,711	21.93
Connecticut.....	30,261,591	340,299	1.12	201,204	75,579	37.56
Continental.....	88,305,470	871,363	0.99	557,939	232,607	50.65
Equitable Fire and Marine.....	26,804,553	269,937	1.01	62,636	19,973	31.89
Fidelity-Phenix.....	75,331,376	780,493	1.04	524,320	284,529	54.27
Fire Association of Philadelphia.....	8,848,298	105,098	1.26	77,237	29,074	37.64
Fireman's Fund.....	29,340,458	312,994	1.07	251,654	232,113	92.23
Firemen's Insurance.....	14,470,525	165,113	1.14	144,731	63,712	44.02
General of Paris.....	30,893,974	268,951	0.87	171,370	70,446	41.11
Girard.....	4,698,405	48,660	1.04	36,528	17,844	48.85
Glens Falls.....	41,638,963	372,606	0.89	237,816	112,750	47.41
Globe and Rutgers.....	158,149,984	1,530,048	0.97	1,077,859	429,860	39.88
Great American.....	85,710,018	838,946	0.98	611,855	369,239	60.35
Hardware Dealers.....	91,801	3,155	3.44	1,168	93	7.95
Hartford Fire.....	181,691,614	1,741,628	0.96	1,391,845	642,533	46.16
Home.....	186,892,511	2,346,756	1.26	1,831,667	947,549	51.73
Insurance Co. of North America.....	176,551,405	1,374,718	0.78	965,885	463,309	47.97
Insurance Co. of State of Pennsylvania.....	28,097,646	253,014	0.90	202,619	75,345	37.23
Lumbermen's Underwriting Alliance.....	18,287,323	306,645	1.68	240,630	187,507	77.92

## 72.—Fire Insurance Business transacted in Canada, 1929—concluded.

Companies.	Gross amount of risks taken during year.	Premiums charged thereon.	Rate of premiums per cent of risks.	Net cash received for premiums.	Net cash paid for losses.	Percentage of losses paid to premiums received.
	\$	\$	p.c.	\$	\$	p.c.
Foreign Companies—concluded—						
Manufacturing Lumbermen's....	13,421,474	271,370	2.02	193,695	63,675	32.87
Manufacturing Woodworkers....	5,468,225	94,006	1.72	74,156	46,456	62.65
Mechanics and Traders.....	1,834,628	57,419	3.13	36,611	3,576	9.77
Merchants Fire.....	13,801,450	128,957	0.93	107,966	46,416	42.99
Millers National.....	3,738,425	50,435	1.35	40,037	45,851	114.52
Minnesota Implement.....	91,801	3,155	3.44	1,168	93	7.95
National-Ben Franklin.....	16,857,179	202,144	1.20	173,030	56,925	32.90
National Fire of Hartford.....	78,290,957	1,055,621	1.35	774,726	395,687	51.07
National Liberty.....	169,600	1,976	1.17	856	none	—
National Union.....	34,497,883	373,665	1.08	290,803	115,746	39.80
La Nationale.....	66,622,743	716,594	1.08	626,080	260,119	41.55
Newark.....	18,009,518	216,376	1.20	115,608	38,599	33.39
New Hampshire.....	12,352,243	98,896	0.80	90,235	50,764	56.26
New Jersey.....	10,816,996	131,179	1.21	84,438	17,262	20.44
Niagara.....	59,667,196	595,447	1.00	363,333	155,826	42.89
Northwestern Mutual.....	7,063,501	140,262	1.99	108,027	15,821	14.65
Northwestern National.....	28,830,750	348,736	1.21	312,456	103,624	33.16
Phoenix of Paris.....	33,460,789	326,137	0.97	204,764	80,391	39.26
Phoenix of Hartford.....	79,462,852	825,913	1.04	468,319	161,423	34.47
Providence Washington.....	39,524,362	351,626	0.89	267,041	158,263	59.27
Queen of America.....	84,735,256	1,007,351	1.19	806,787	308,698	38.26
Retail Hardware.....	91,801	3,155	3.44	1,168	93	7.95
St. Paul Fire and Marine.....	68,475,692	615,655	0.90	429,363	167,945	39.11
Springfield Fire and Marine....	75,975,336	700,817	0.92	451,810	214,029	47.37
Sterling.....	385,410	4,210	1.09	none	none	—
Stuyvesant.....	12,740,267	154,943	1.22	111,869	40,762	36.44
Tokio.....	2,883,467	21,524	0.75	7,629	499	6.54
L'Union of Paris.....	40,142,420	415,355	1.03	332,613	161,734	48.63
United States Fire.....	25,742,342	223,700	0.87	173,940	15,359	8.83
Vulcan.....	15,149,069	145,714	0.96	97,917	30,217	30.86
Westchester.....	43,057,353	459,242	1.07	285,597	102,299	35.82
<b>Totals.....</b>	<b>2,298,504,593</b>	<b>23,830,971</b>	<b>1.04</b>	<b>17,191,829</b>	<b>7,751,901</b>	<b>45.09</b>
<b>Grand Totals.....</b>	<b>6,790,670,610</b>	<b>71,140,111</b>	<b>1.05</b>	<b>50,527,937</b>	<b>21,954,283</b>	<b>43.45</b>



**73.—Amounts received as Fire Insurance Premiums and paid as Losses, with percentage of Losses to Premiums, 1869-1920.**

Year.	Premiums received.	Losses paid.	Percentage of losses to premiums.	Year.	Premiums received.	Losses paid.	Percentage of losses to premiums.
	\$	\$	p.c.		\$	\$	p.c.
1869.....	1,785,539	1,027,726	57.56	1895.....	6,943,382	4,993,750	71.92
1870.....	1,916,779	1,624,837	84.77	1896.....	7,075,850	4,173,501	58.98
1871.....	2,321,716	1,549,199	66.73	1897.....	7,157,661	4,701,833	65.69
1872.....	2,628,710	1,909,975	72.66	1898.....	7,350,131	4,784,487	65.09
1873.....	2,968,416	1,682,184	55.67	1899.....	7,910,492	5,182,038	65.51
1874.....	3,522,303	1,926,159	54.68	1900.....	8,331,948	7,774,293	93.31
1875.....	3,594,764	2,563,531	71.31	1901.....	9,650,348	6,774,956	70.20
1876.....	3,708,006	2,867,295	77.33	1902.....	10,577,084	4,152,289	39.26
1877.....	3,764,005	3,490,919	225.58	1903.....	11,384,762	5,870,716	51.57
1878.....	3,368,430	1,822,674	54.11	1904.....	13,169,882	14,099,534	107.06
1879.....	3,227,488	2,145,198	66.47	1905.....	14,285,671	6,000,519	42.00
1880.....	3,479,577	1,666,578	47.90	1906.....	14,687,963	6,584,291	44.83
1881.....	3,827,116	3,169,824	82.83	1907.....	16,114,475	8,445,041	52.41
1882.....	4,229,706	2,664,986	63.01	1908.....	17,027,275	10,279,455	60.37
1883.....	4,624,741	2,920,228	63.14	1909.....	17,049,464	8,646,826	50.72
1884.....	4,980,128	3,245,323	65.16	1910.....	18,725,531	10,292,393	54.96
1885.....	4,852,460	2,679,287	55.22	1911.....	20,575,255	10,936,948	53.16
1886.....	4,932,335	3,301,388	66.93	1912.....	23,194,518	12,119,581	52.25
1887.....	5,244,502	3,403,514	64.90	1913.....	25,745,947	14,003,759	54.39
1888.....	5,437,263	3,073,822	56.53	1914.....	27,499,158	15,347,284	55.81
1889.....	5,588,016	2,876,211	51.47	1915.....	26,474,833	14,161,949	53.49
1890.....	5,886,071	3,266,567	55.97	1916.....	27,783,852	15,114,063	54.40
1891.....	6,168,716	3,905,697	63.31	1917.....	31,246,530	16,379,101	52.42
1892.....	6,512,327	4,377,270	67.22	1918.....	35,954,405	19,359,252	53.84
1893.....	6,793,595	5,052,690	74.37	1919.....	40,031,474	16,679,355	41.67
1894.....	6,711,369	4,589,363	68.38	1920.....	50,527,937	21,954,283	43.45
				<b>Total.....</b>	<b>608,499,906</b>	<b>346,613,937</b>	<b>56.96</b>

**74.—Totals of Fire Insurance Premiums received and Losses paid, with percentage of Losses to Premiums by Nationality of Companies, 1869-1920.**

Companies.	Premiums received.	Losses paid.	Percentage of losses to premiums.
	\$	\$	p.c.
Canadian companies.....	120,820,707	70,848,988	58.64
British companies.....	347,994,650	201,029,234	57.76
Foreign companies.....	139,684,549	74,735,715	53.50
<b>Total.....</b>	<b>608,499,906</b>	<b>346,613,937</b>	<b>56.96</b>

**75.—Amount of Fire Insurance at Risk in Canada, 1869-1920.**

Year.	Amount in force at end of year.	Year.	Amount in force at end of year.	Year.	Amount in force at end of year.	Year.	Amount in force at end of year.
1869.....	\$188,359,800	1883.....	\$572,264,041	1897.....	\$ 868,322,217	1911.....	\$2,279,808,346
1870.....	191,549,586	1884.....	605,507,789	1898.....	895,394,107	1912.....	2,684,335,895
1871.....	228,453,784	1885.....	611,794,479	1899.....	936,869,668	1913.....	3,151,930,389
1872.....	251,722,940	1886.....	586,773,022	1900.....	992,332,360	1914.....	3,456,019,009
1873.....	278,754,835	1887.....	634,767,337	1901.....	1,038,687,619	1915.....	3,531,620,802
1874.....	306,844,219	1888.....	650,735,059	1902.....	1,075,263,168	1916.....	3,720,058,236
1875.....	364,421,029	1889.....	684,538,378	1903.....	1,140,453,716	1917.....	3,986,197,514
1876.....	404,608,180	1890.....	720,679,621	1904.....	1,215,013,931	1918.....	4,523,514,841
1877.....	420,342,681	1891.....	759,602,191	1905.....	1,318,146,495	1919.....	4,923,024,381
1878.....	409,899,701	1892.....	821,410,072	1906.....	1,443,902,244	1920.....	5,969,872,278
1879.....	407,357,985	1893.....	814,687,057	1907.....	1,614,703,536		
1880.....	411,563,271	1894.....	836,067,202	1908.....	1,700,708,263		
1881.....	462,210,968	1895.....	837,872,864	1909.....	1,863,276,504		
1882.....	526,856,478	1896.....	845,574,352	1910.....	2,034,276,740		

**76.—Assets of Canadian Companies doing Fire Insurance, or Fire Insurance and other classes of Insurance, and Assets in Canada of Companies other than Canadian transacting such business in Canada, 1915-20.**

Items.	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
<b>Canadian Companies—</b>					
Real estate.....	1,295,400	1,423,963	1,428,921	2,027,655	2,009,353
Loans on real estate.....	3,343,750	3,186,488	2,232,143	2,101,585	2,275,827
Stocks, bonds and debentures.....	10,785,277	12,047,378	16,259,079	20,915,449	23,291,113
Agents' balances and premiums out- standing.....	2,718,065	3,467,806	3,412,180	4,950,477	5,535,073
Cash on hand and in banks <sup>1</sup> .....	2,271,752	3,737,752	4,542,576	4,538,576	4,997,250
Interest and rents.....	292,548	365,090	415,346	480,352	521,380
Other assets.....	471,452	485,293	443,740	682,642	1,010,843
<b>Total assets.....</b>	<b>21,178,244</b>	<b>24,713,770</b>	<b>28,733,985</b>	<b>35,696,736</b>	<b>39,640,839</b>
<b>British Companies—</b>					
Real estate.....	2,361,921	2,378,570	2,699,024	2,563,168	2,899,249
Loans on real estate.....	5,321,817	12,709,933	12,812,262	3,969,328	13,047,264
Stocks, bonds and debentures.....	15,487,919	17,352,975	22,972,016	24,460,316	32,024,536
Agents' balances and premiums out- standing.....	2,275,667	2,713,810	2,948,869	3,612,027	4,124,467
Cash on hand and in banks <sup>1</sup> .....	2,848,486	4,411,767	3,733,382	3,710,520	4,817,260
Interest and rents.....	205,650	528,604	549,132	225,742	819,590
Other assets in Canada.....	219,340	231,379	359,215	517,991	698,257
<b>Total assets in Canada.....</b>	<b>28,720,800</b>	<b>40,327,038</b>	<b>46,073,900</b>	<b>39,059,092</b>	<b>58,430,623</b>
<b>Foreign Companies—</b>					
Real estate.....	none	none	none	none	none
Loans on real estate.....	none	none	none	none	none
Stocks, bonds and debentures.....	9,285,183	10,339,773	12,752,667	13,840,421	17,745,711
Agents' balances and premiums out- standing.....	1,485,304	1,573,316	1,776,201	2,186,593	2,551,869
Cash on hand and in banks <sup>1</sup> .....	1,196,765	2,084,495	2,478,986	4,302,292	6,626,823
Interest and rents.....	124,360	145,869	148,362	158,401	183,333
Other assets.....	42,167	52,026	67,949	75,283	93,478
<b>Total assets in Canada.....</b>	<b>12,133,779</b>	<b>14,195,479</b>	<b>17,224,165</b>	<b>20,562,990</b>	<b>27,201,214</b>
<b>All Companies—</b>					
Real estate.....	3,657,321	3,802,533	4,127,945	4,590,823	4,908,602
Loans on real estate.....	8,665,567	15,896,421	15,044,405	6,070,913	15,323,091
Stocks, bonds and debentures.....	35,558,370	39,740,126	51,983,762	59,216,186	73,061,360
Agents' balances and premiums out- standing.....	6,479,036	7,754,932	8,137,250	10,749,097	12,211,409
Cash on hand and in banks <sup>1</sup> .....	6,317,003	10,234,014	10,754,944	12,551,888	16,441,333
Interest and rents.....	622,558	1,039,563	1,112,840	864,495	1,524,303
Other assets.....	732,959	768,698	870,904	1,275,916	1,802,578
<b>Total assets in Canada.....</b>	<b>62,032,823</b>	<b>79,236,287</b>	<b>92,032,050</b>	<b>95,318,818</b>	<b>125,272,676</b>

<sup>1</sup>Or deposited with Governments.

**77.—Liabilities of Canadian Companies doing Fire Insurance, or Fire Insurance and other classes of Insurance, and Liabilities in Canada of Companies other than Canadian transacting such business in Canada, 1916-20.**

Items.	1916.	1917.	1918.	1919.	1920.
	\$	\$	\$	\$	\$
Canadian Companies—					
Unsettled losses.....	1,832,805	3,382,071	4,114,105	4,221,470	4,950,257
Reserve of unearned premiums.....	5,960,745	7,004,629	7,925,912	9,355,790	10,908,023
Sundry items.....	1,783,253	1,902,409	2,646,579	4,170,922	4,374,692
<b>Total liabilities, not including capital</b>	<b>9,576,803</b>	<b>12,289,109</b>	<b>14,686,596</b>	<b>17,748,182</b>	<b>20,232,972</b>
Excess of assets over liabilities, excluding capital.....	11,601,441	12,424,661	14,047,389	17,948,554	19,407,867
Capital stock paid up.....	9,706,336	10,455,893	11,323,256	12,937,306	13,884,478
British Companies—					
Unsettled losses.....	1,976,475	2,846,585	2,258,557	2,529,672	3,019,747
Reserve of unearned premiums.....	9,699,494	10,827,544	12,084,409	13,563,203	16,561,259
Sundry items.....	417,151	620,012	1,244,533	2,461,967	1,471,491
<b>Total liabilities in Canada.....</b>	<b>12,093,120</b>	<b>14,294,141</b>	<b>15,587,499</b>	<b>18,554,842</b>	<b>21,052,497</b>
Excess of assets over liabilities, excluding capital.....	16,627,680	26,032,897	30,486,401	20,504,250	37,378,126
Capital stock paid up.....	—	—	—	—	—
Foreign Companies—					
Unsettled losses.....	1,166,977	1,774,278	1,272,279	1,335,225	1,937,173
Reserve of unearned premiums.....	5,129,402	5,809,042	6,554,146	7,620,914	9,621,789
Sundry items.....	262,587	309,892	785,080	1,441,183	1,313,944
<b>Total liabilities in Canada.....</b>	<b>6,558,966</b>	<b>7,893,212</b>	<b>8,611,505</b>	<b>10,397,322</b>	<b>12,872,906</b>
Excess of assets over liabilities, excluding capital.....	5,574,813	6,302,267	8,612,660	10,165,668	14,328,308
Capital stock paid up.....	—	—	—	—	—
All companies—					
Unsettled losses.....	4,976,257	8,002,934	7,644,941	8,086,367	9,907,177
Reserve of unearned premiums.....	20,789,641	23,641,215	26,564,467	30,539,907	37,091,071
Sundry items.....	2,462,991	2,832,313	4,676,192	8,074,072	7,160,127
<b>Total liabilities in Canada, not including capital.....</b>	<b>28,228,889</b>	<b>34,476,462</b>	<b>38,885,600</b>	<b>46,700,346</b>	<b>54,158,375</b>
Excess of assets over liabilities, excluding capital.....	33,803,934	44,759,825	53,146,450	48,618,472	71,114,201
Capital stock paid up <sup>1</sup> .....	9,706,336	10,455,893	11,323,256	12,937,306	13,884,478

<sup>1</sup>Canadian companies only.

**78.—Cash Income and Expenditure of Canadian Companies doing Fire Insurance or Fire Insurance and other classes of Insurance, and Cash Income and Expenditure in Canada of Companies other than Canadian transacting such business in Canada, 1916-20.**

Items.	1916.	1917.	1918.	1919.	1920.
<b>INCOME.</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Canadian Companies—</b>					
Net cash for premiums from fire and other.....	11,146,958	15,397,572	17,586,476	18,329,956	21,662,202
Interest and dividends on stocks, etc....	739,599	780,713	962,863	1,240,566	1,424,109
Sundry items.....	78,632	28,585	28,398	65,674	190,538
<b>Total cash income.....</b>	<b>11,965,189</b>	<b>16,206,870</b>	<b>18,577,737</b>	<b>19,636,196</b>	<b>23,276,849</b>
<b>British Companies<sup>1</sup>—</b>					
Net cash for premiums.....	14,294,801	16,317,315	18,658,712	20,377,872	25,332,651
Interest and dividends on stocks, etc....	952,690	1,572,080	1,680,468	1,219,425	2,026,582
From branches other than Fire or Life.....	2,239,324	3,371,441	3,587,437	4,429,295	7,636,827
Sundry items.....	1,557	1,505	783	1,084	1,053
<b>Total cash income.....</b>	<b>17,488,372</b>	<b>21,262,341</b>	<b>23,927,400</b>	<b>26,027,676</b>	<b>34,997,113</b>
<b>Foreign Companies<sup>1</sup>—</b>					
Net cash for premiums.....	8,671,173	10,146,386	11,725,601	13,237,767	17,191,584
Interest and dividends on stocks, etc....	445,970	448,136	582,441	673,023	898,663
From branches other than Fire or Life.....	1,551,295	2,801,764	2,518,135	2,789,164	4,011,276
Sundry items.....	None.	5,573	3,012	145	202
<b>Total cash income.....</b>	<b>10,668,438</b>	<b>13,401,859</b>	<b>14,829,189</b>	<b>16,700,099</b>	<b>22,101,725</b>
<b>EXPENDITURE.</b>					
<b>Canadian Companies—</b>					
Paid for losses.....	6,560,438	8,301,165	5,176,053	5,031,061	5,712,042
General expenses.....	4,040,280	4,985,345	4,018,550	4,498,537	5,418,225
On account of branches other than Fire or Life.....	—	—	6,386,814	7,571,999	9,487,924
Dividends or bonus to shareholders.....	438,319	1,216,795	490,482	869,195	1,087,082
<b>Total cash expenditure.....</b>	<b>11,039,037</b>	<b>14,503,305</b>	<b>16,071,899</b>	<b>17,970,792</b>	<b>21,705,273</b>
Excess of income over expenditure.....	926,152	1,703,565	2,505,838	1,665,404	1,571,576
<b>British Companies<sup>1</sup>—</b>					
Paid for losses.....	7,926,461	8,358,290	9,908,001	8,387,864	11,004,078
General expenses.....	4,812,638	5,423,713	6,320,503	7,121,830	9,020,281
On account of branches other than Fire or Life.....	1,968,887	2,905,050	2,997,315	4,233,299	6,665,666
<b>Total cash expenditure.....</b>	<b>14,707,986</b>	<b>16,687,053</b>	<b>19,226,119</b>	<b>19,742,993</b>	<b>26,690,025</b>
Excess of income over expenditure.....	2,780,386	4,575,288	4,701,281	6,284,683	8,307,088
<b>Foreign Companies<sup>1</sup>—</b>					
Paid for losses.....	4,589,096	5,643,986	6,709,347	5,555,268	7,751,902
General expenses.....	3,004,448	3,368,986	3,965,025	4,483,060	6,087,793
On account of branches other than Fire or Life.....	1,821,147	1,987,947	1,711,862	2,328,857	3,212,956
<b>Total cash expenditure.....</b>	<b>9,414,691</b>	<b>10,980,919</b>	<b>12,386,234</b>	<b>12,367,185</b>	<b>17,052,621</b>
Excess of income over expenditure.....	1,253,747	2,420,940	2,442,955	4,332,914	5,049,104

<sup>1</sup>Income and expenditure in Canada.



**79.—Amount of Net Premiums written and Net Losses incurred in Canada, by Provinces, by Canadian, British and Foreign Companies transacting Fire Insurance, 1920.**

(Licensed re-insurance deducted.)

Provinces.	Canadian.		British.		Foreign.	
	Premiums.	Losses.	Premiums.	Losses.	Premiums.	Losses.
	\$	\$	\$	\$	\$	\$
P. E. Island.....	42,674	10,892	130,438	32,813	66,005	41,745
Nova Scotia.....	617,507	382,742	1,134,060	758,409	1,212,974	960,930
New Brunswick.....	479,746	365,697	1,255,818	835,910	1,078,752	652,833
Quebec.....	2,378,286	1,301,742	6,230,241	3,390,570	3,851,880	2,432,477
Ontario.....	4,182,061	1,634,543	9,120,262	3,488,147	4,885,576	1,929,094
Manitoba.....	980,839	400,988	1,760,300	706,527	1,494,526	638,795
Saskatchewan.....	1,278,918	519,552	1,721,139	676,775	1,345,577	627,163
Alberta.....	966,264	309,078	1,645,491	607,209	1,363,454	453,455
British Columbia.....	895,417	260,505	2,392,153	675,623	2,170,204	720,662
Yukon.....	1,852	none	1,913	24	3,173	146
<b>Total.....</b>	<b>11,823,614</b>	<b>5,185,739</b>	<b>25,465,546<sup>1</sup></b>	<b>11,229,301<sup>2</sup></b>	<b>17,472,121</b>	<b>8,457,300</b>

<sup>1</sup>Including \$76,731 premiums which have not been separated according to provinces.

<sup>2</sup>Including \$57,294 losses which have not been separated according to provinces.

**80.—Dominion and Provincial Fire Insurance in Canada, 1920.**

Business transacted by	Net insurance written.	Net in force Dec. 31, 1920.	Net premiums received.	Net losses paid.
	\$	\$	\$	\$
1. Dominion licensees.....	6,790,670,610	5,969,872,278	50,527,243	21,935,460
2. Provincial licensees—				
(a) Provincial companies within provinces by which they are incorporated.....	429,158,041	960,074,188	4,839,217	2,181,804
(b) Provincial companies within provinces other than those by which they are incorporated.....	42,329,353	94,030,823	377,578	160,793
Total for Provincial Companies.....	471,487,394	1,054,105,011	5,216,795	2,342,597
<b>Grand Totals.....</b>	<b>7,262,158,004</b>	<b>7,023,977,289</b>	<b>55,744,038</b>	<b>24,278,057</b>

**81.—Fire Insurance carried on property in Canada in 1920, under Section 129 of the Insurance Act, 1917, by Companies, Associations or Underwriters not licensed to transact business in Canada.**

Companies.	Amount of Insurance.
Lloyds' Associations.....	\$ 39,640,073
Reciprocal Underwriters.....	43,470,332
Mutual Companies.....	339,170,971
Stock Companies.....	61,477,065
<b>Total.....</b>	<b>483,758,441</b>

Description of Property.	
Lumber and Lumber Mills.....	\$ 22,629,557
Other Industrial Plants and Mercantile Establishments.....	360,736,825
Stock and Merchandise.....	92,324,998
Railway Property and Equipment.....	4,294,826
Miscellaneous.....	3,772,235
<b>Total.....</b>	<b>483,758,441</b>

Amount by Provinces.			
Prince Edward Island.....	\$ 65,911	Saskatchewan.....	\$ 3,926,794
Nova Scotia.....	10,128,784	Alberta.....	4,115,802
New Brunswick.....	23,002,042	British Columbia.....	21,383,257
Quebec.....	161,898,703	Yukon.....	37,800
Ontario.....	246,352,984	<b>Total.....</b>	<b>483,758,441</b>
Manitoba.....	12,846,364		

### Life Insurance.

#### AN HISTORICAL NOTE.<sup>1</sup>

Life Insurance, introduced into Canada by companies from the British Isles and from the United States as a fairly well developed institution, and adopted almost as early in its then form by a native company, can hardly be said to have a distinctive Canadian history. The technique and practice show distinctly the effect of both British and United States influences. Among the first companies to transact life insurance in Canada may be mentioned; Scottish Amicable (1846), Standard (1847), Canada (1847), Ætna (1850), Liverpool and London and Globe (1851), Royal (1851). The late 60's and early 70's were stirring years in life insurance the world over. In England, statutes were passed in 1870, '71 and '72 embodying principles—"Freedom and Publicity"—which have, without any fundamental change, since governed in life insurance; and in the year 1909 these same principles were extended and adapted to four kinds of insurance. In Canada no less than fourteen companies began business in this period, including four native companies, namely, Sun (incorporated 1865, began business 1871), Mutual of Canada (Ontario Mutual, 1870), Confederation (1871), London (1874). By 1875 there were at least twenty-six companies, possibly several more, competing for the available business in Canada, as against forty-four companies licensed by the Dominion, and a few provincial companies, in 1921. A comparison of the first and last lines in Table (79) is of interest in this connection.

The first Federal Insurance Act was passed in 1868. It prohibited the transaction of insurance business by any company (except companies under provincial authority transacting business within the province) not licensed by the Minister of Finance. A deposit of \$50,000 was required. The main provisions of this Act are traceable in the insurance legislation of the present day. Acts were passed in 1871, 1874, 1875 (consolidation, Fire and Inland Marine; provision for appointment of Superintendent of Insurance under Minister of Finance); 1875 (extending powers of Superintendent to Life and other companies); 1877 (consolidating the laws in respect of insurance; quinquennial valuation by Superintendent); 1885 (dealing with commercial insurance companies transacting business on the so-called co-operative or mutual plan, being what is known as assessment companies, fraternal societies excluded); 1886 (consolidation); 1894 (life insurance in combination with any other insurance business forbidden; issue of annuities and endowment assurances by assessment companies prohibited, and new assessment companies required to procure at least 500 applications for membership before license); 1895 (exempting certain fraternal organizations—hazardous occupations—granting life, accident, sickness or disability insurance to members from application of Insurance Act); 1895 (certain amendments as to foreign companies); 1899 (valuation standard change to  $Hm3\frac{1}{2}\%$  applicable to business subsequent to January 1, 1900; all earlier

<sup>1</sup>Contributed by Mr. A. D. Watson, Actuary, Department of Insurance, Ottawa.

business to be brought up to Hm4% standard by 1910, and Hm3½% by 1915); 1906 (consolidation); 1910 (including many new provisions and restrictions to some extent in harmony with the recommendations of the Royal Commission on Insurance, 1906); 1917 (largely a new alignment necessitated by the Privy Council decision, 1915, in reference to Sections 4 and 70 of the 1910 Act); 1919 (amendment affecting friendly societies).

The legislation, briefly reviewed above, shows traces of the influence of British and United States legislation. In many respects it may be said to be mid-way between the "freedom and publicity" legislation of England and the inquisitorial and restrictive legislation of the United States. Following the disclosures of the "Armstrong" investigation in New York, a Royal Commission was appointed in 1906 to inquire into the conduct of life insurance business in Canada; and, under the same technical adviser as the "Armstrong Committee", the recommendations of the Commission were in the main the same as of that committee. The legislation, however, passed as a result of the investigation did not embody many of the recommendations of the Commission. At the same time there is possibly a somewhat closer analogy between the Acts of 1910 and 1917 and certain United States statutes passed in recent years than obtained at an earlier period.

The development of life insurance in Canada, as in other English speaking countries at least, has been marked by an increased service to the individual policyholder. Under the stress of competition, companies more and more seek to bring the benefits of insurance within the reach of an ever-widening *clientèle*; and the benefits which may now be obtained under a life insurance policy are calculated to meet the needs of the policyholder and of his dependants, whether in event of old age or in event of death or of permanent disability. Policies may be obtained under which, if the policyholder becomes unable to follow any occupation by reason of ill-health or accident, not only do premiums cease but in addition he receives an income under the policy without any reduction in the benefits formerly accruing to the beneficiary at death of the insured.

Within the last few years has been introduced what is known as "Group Insurance", a plan whereby a group of persons, usually employees, are insured by their employer for a uniform amount or an amount otherwise determined by a formula under one policy, generally on the term plan, the employer paying the premium, each employee having the right to obtain an individual policy at ordinary normal rates, without medical examination, on termination of employment. Under the "Group Policy" the expenses are less than if individual policies were issued on each life, and consequently the premiums are lower. The plan is as yet in the development stages, but seems to be filling a want.

Industrial life insurance, that is to say the issue of policies of small amounts at weekly or monthly premiums paid to collectors or agents of the company who call at the home of the insured, is transacted along the same general lines as in other English speaking

countries. The unit premium is 5 cents per week, the sum assured, not the premium, varying with the age at issue of the policy. Children and the aged are alike insured. In some companies the business is written without any medical examination or inspection, other than inspection by the agent who procures the application or in some cases by a salaried official. In some other companies, a single medical examination is required for amounts of over, say, \$300, but for smaller amounts applications are accepted from the agent as above, or the applicant may be required to appear before the medical examiner, but is not examined as ordinarily understood. The amount of the individual policy is small and the total amount on any one life under several policies is small. It really provides burial insurance for the poorer industrial classes. By reason of the frequent calls of the collectors and the small amount of each policy a very large proportion of the premiums are absorbed in expenses. The companies concerned have been devoting their energies to devising ways and means of reducing the expense ratio, and with success, thus making possible better returns to policyholders. There are at present two United States, one Australian, and one Canadian company transacting this business in Canada.

Two other phases in the development of life insurance in Canada require notice, namely "assessmentism", as practised for a period by a few companies, and "fraternalism", as practised by friendly societies.

Assessmentism was an attempt to obtain life insurance protection at the lowest possible cost. In its cruder forms the age of the individual insured was ignored, except that entrance was restricted to fairly early life, a uniform, and usually low, assessment being charged. There was provision in the contract for making additional assessments in certain contingencies—excessive deaths, or reduction in funds of the company. It was held that as the means were then at hand for meeting the exigencies of the business at any time, the companies were sound; and they seemed to be sound, even prosperous, to those unable to see beyond the surface of things, so long as a large proportion of the lives assured were at the early ages, say under 40 or 45 where the rates of mortality are low and fairly uniform. But when a considerable proportion of members had passed to the middle and old ages the weaknesses of the system soon began to be disclosed. The "new blood" theory was then developed which, stated in simple terms, meant that enough young lives were to be induced to insure so as to keep the average mortality of the company as a whole at a low rate, thus obviating the necessity for excessive assessments. These young lives, however, in turn grew old and thus the aged become too numerous to be neutralized by "new blood"; assessments became frequent and consequently burdensome; healthy lives, especially the young, soon found they could get insurance much cheaper in ordinary companies and declined to pay the assessments. With their withdrawal, mortality, with no adequate reserves built up to draw upon, soon became unmanageable, and the final *débâcle* was in sight. It is impossible here to follow assessmentism through all its



modifications in practice—merely attempts, perhaps generally honest enough, to bolster up an unsound system. The first of these companies appeared in Canada in 1885 and the last disappeared about 15 years ago. Legislation in respect of these companies required that they should represent the nature of their business correctly to the public and the insured. A deposit of \$50,000 was required; death benefits were to be a first charge on all assessments; each policy had to state: "This association is not required by law to maintain the reserve which is required of ordinary life insurance companies"; and the words "Assessment System" were required to be printed on every policy, application, circular, etc.,

Fraternal societies made their appearance in Canada at a very early date. So far as life insurance is concerned, the development is, as in the case of old line life companies, of more recent years. As above noted, they were at first exempt from the provisions of the Dominion Acts applicable to assessment companies. Notwithstanding the exemption, fundamentally, the business and the methods of the two types of institution as respects life insurance were fairly analogous, though the machinery differed. Eventually the provisions of the statutes originally designed for assessment companies were applied to fraternal societies, and continued to apply until the passing of the 1919 Amendment to the Insurance Act.

The fate of friendly societies has been more fortunate than that of assessment companies. Many of them have gone through several readjustments of rates and benefits, and although this has meant loss in membership and a temporary set-back, they are now doing business with due regard for sound principles. The 1919 Amendment requires friendly societies to be valued annually by an actuary and if a deficiency in funds is shown, it must be made good within a reasonable period by an adjustment of rates or benefits. Thus, societies are in no way in the dark as to their actual condition, and if any weakness should be disclosed, the necessary remedy can be applied before anything in the nature of a serious situation arises.

With the passing of the 1919 Amendment, certain United States societies, previously transacting business in Canada under provincial authority, were required to obtain Dominion licenses or discontinue business. Eleven of these societies have so far been licensed. Some of them are not actuarially solvent, but unless they attain solvency by March 31, 1925, they must thereafter discontinue business in Canada.

The progress of life insurance in Canada may be studied from the tables appended.

**Life Insurance Statistics.**—The business of life insurance was transacted in Canada in 1920 by 44 active Dominion companies, including 25 Canadian, 8 British and 11 foreign companies.

As shown by the historical statistics of Table 82, the life insurance business in Canada has expanded from very small beginnings, the total life insurance in force in Dominion companies in 1869 being only \$35,080,082, while in 1920 it was \$2,657,025,493, the amount

per head of the estimated population of Canada having nearly doubled since 1913—an evidence of the general recognition of the fact that in view of the higher prices of commodities, a larger amount of life insurance is necessary for the adequate protection of dependants. Notable also from these historical statistics is the fact that in this field the British companies, which were the leaders in 1869, have fallen far behind the Canadian and the foreign companies.

The total amount of new insurance effected during the year 1920 was \$641,778,095, the largest figure on record, while the premiums paid were \$90,218,047, as compared with \$74,708,509 in 1919. In Table 83 detailed statistics are given of the business of Canadian, British and foreign companies respectively, by companies, in 1920, while Table 84 is a summary showing the business of Canadian, British and foreign companies for the past five years. Table 85 gives the insurance death-rate by classes of companies. Tables 86, 87 and 88 show respectively the assets, liabilities and cash income and expenditure of Canadian and other life insurance companies for the years 1916 to 1920, and Tables 89 and 90 show the net insurance in force and the premium income for the past six years. Statistics of Dominion fraternal insurance is given in Table 91, and of Dominion and provincial insurance combined in Table 92, which shows that on December 31, 1920, the total life insurance in force in Canada was \$3,034,524,013.

**Life Insurance on the Assessment Plan.**—Table 91 gives the statistics of life insurance on the assessment plan, that is, insurance effected through fraternal or friendly societies by assessments on the members thereof and with annual dues to meet expenses. The statistics in this table relate, however, only to the eight Canadian societies reporting to the Insurance Department of the Dominion Government, viz., the Alliance Nationale, the Ancient Order of Foresters, the Artisans Canadiens, the Catholic Mutual Benefit Association, the Commercial Travellers' Mutual Benefit Society, the Independent Order of Foresters (whose statistics include sick and funeral departments), the Royal Guardians and the Woodmen of the World.

Under an amendment to the Insurance Act which became effective January 1, 1920, it became necessary for all foreign fraternal societies previously transacting business in Canada under provincial licenses to obtain licenses under the Insurance Act in order to be permitted to continue to issue new insurance in Canada. Ten such societies obtained such licenses; viz. The Ladies' Catholic Benevolent Association, The Maccabees, Royal Arcanum, Woman's Benefit Association of the Maccabees, Catholic Order of Foresters, The Workmen's Circle, Knights of Columbus, Association Canada-Américaine, Western Mutual Life Association and Knights of Pythias, while the Jewish National Workers' Alliance of America has also obtained a license. The aggregate figures of the insurance in force in these societies are given in a foot-note to the Table.

## 82.—Life Insurance in Force and Effected in Canada, 1869 to 1920.

Year.	Amount in Force.				Insurance in force per head of estimated population.	Amount of new Insurance effected during year.
	Canadian Companies.	British Companies.	Foreign Companies.	Total.		
	\$	\$	\$	\$	\$ cts.	\$
1869.....	5,476,358	16,318,475	13,885,249	35,680,082	10 45	12,854,132
1870.....	6,404,437	17,391,922	18,898,353	42,694,712	12 36	12,194,696
1871.....	8,711,111	18,405,325	18,709,499	45,825,935	13 15	13,332,626
1872.....	13,070,811	19,258,166	34,905,707	67,234,684	18 62	21,070,101
1873.....	15,777,197	18,862,191	42,861,508	77,500,896	21 13	21,053,618
1874.....	19,634,319	19,863,867	46,218,139	85,716,325	22 41	19,108,221
1875.....	21,957,296	19,455,607	43,596,361	85,009,264	21 87	15,074,258
1876.....	24,649,284	18,873,173	40,728,461	84,250,918	21 33	13,890,127
1877.....	26,870,224	19,349,204	39,468,475	85,687,903	21 35	13,534,667
1878.....	28,656,556	20,078,533	36,016,848	84,751,937	20 78	12,169,755
1879.....	33,246,543	19,410,829	33,616,330	86,273,702	20 81	11,354,224
1880.....	37,838,518	19,789,863	33,643,745	91,272,126	21 65	13,906,887
1881.....	46,041,591	20,983,092	36,266,249	103,290,932	23 88	17,618,011
1882.....	53,855,051	22,329,368	38,857,629	115,042,048	26 24	20,112,755
1883.....	59,213,609	23,511,712	41,471,554	124,196,875	28 02	21,772,960
1884.....	66,519,958	24,317,172	44,616,596	135,453,726	30 20	23,417,912
1885.....	74,591,139	25,930,272	49,440,735	149,962,146	33 04	27,164,988
1886.....	88,181,859	27,225,607	55,908,230	171,315,696	37 33	35,171,348
1887.....	101,796,754	28,163,329	61,734,187	191,694,270	41 33	38,008,310
1888.....	114,034,279	30,003,210	67,724,094	211,761,583	45 17	41,226,529
1889.....	125,125,692	30,488,618	76,349,392	231,963,702	48 94	44,556,937 <sup>1</sup>
1890.....	135,218,990	31,613,730	81,591,847	248,424,567	51 83	40,523,456
1891.....	143,368,817	32,407,937	85,698,475	261,475,229	54 10	37,866,287
1892.....	154,709,077	33,692,706	90,708,482	279,110,265	57 09	44,620,013
1893.....	167,475,872	33,543,884	94,602,966	295,622,722	59 89	45,202,847
1894.....	177,511,846	33,911,885	96,737,705	308,161,436	62 96	49,525,257
1895.....	188,326,057	34,341,172	96,590,352	319,257,581	63 42	44,341,198
1896.....	195,303,042	34,837,448	97,660,009	327,800,499	64 45	42,624,570
1897.....	208,655,459	35,293,134	100,063,684	344,012,277	66 90	48,267,665
1898.....	226,209,636	36,606,195	105,708,154	368,523,985	70 88	54,764,673
1899.....	252,201,516	38,025,948	113,943,209	404,170,673	76 85	67,400,733
1900.....	267,151,086	39,485,844	124,433,416	431,069,846	81 00	68,896,092
1901.....	284,684,621	40,216,186	138,868,227	463,769,034	86 34	73,899,228
1902.....	308,202,596	41,556,245	159,053,464	508,812,305	91 98	80,552,966
1903.....	335,638,940	42,127,260	170,676,800	548,443,000	96 99	91,567,805
1904.....	364,640,166	42,608,738	180,631,886	587,880,790	100 92	98,306,102
1905.....	397,946,902	43,809,211	188,578,127	630,334,240	105 20	105,907,336
1906.....	420,864,847	45,644,951	189,740,102	656,260,900	106 35	95,013,205
1907.....	450,573,724	46,462,314	118,487,447	685,523,485	108 78	90,382,932
1908.....	480,266,931	46,161,957	193,087,126	719,516,014	110 85	99,896,206
1909.....	515,415,437	46,985,192	217,956,351	780,356,980	116 56	131,739,078
1910.....	565,667,110	47,816,775	242,629,174	856,113,059	123 77	152,762,520
1911.....	626,770,154	50,919,675	272,530,942	950,220,771	131 85	176,866,979
1912.....	706,656,117	54,537,725	309,114,827	1,070,308,669	145 32	219,205,103
1913.....	750,637,092	58,176,795	359,775,330	1,168,590,027	155 25	231,608,546
1914.....	794,520,423	60,770,658	386,869,397	1,242,160,478	161 47	217,006,516
1915.....	829,972,809	58,087,018	423,556,850	1,311,616,677	166 83	221,119,558
1916.....	895,528,435	59,151,931	467,499,266	1,422,179,632	176 99	231,101,625
1917.....	996,699,282	58,617,506	529,725,775	1,585,042,563	193 77	282,120,420
1918.....	1,105,503,447	60,296,113	619,261,713	1,785,061,273	214 33	313,251,556
1919.....	1,362,631,562	66,908,064	758,297,691	2,187,837,317	258 04	524,543,629
1920.....	1,664,348,605	76,883,090	915,793,798	2,657,025,493	307 83	641,778,095

<sup>1</sup>Including 20 months' business of the Canada Life.

## 83.—Life Insurance in force and effected in Canada, 1920.

Companies doing business.	Policies Issued.		Policies in Force.		Net Premium Income.	Net Amount of policies become claims. <sup>1</sup>
	No.	Gross Amount.	No.	Net Amount.		
<b>Canadian Companies—</b>		\$		\$	\$	\$
Canada.....	11,727	37,651,708	76,473	180,428,029	6,943,346	2,651,894
Capital.....	712	1,262,790	3,784	6,154,185	215,859	22,080
Commercial.....	70	248,471	334	685,669	22,586	3,000
Confederation.....	10,212	24,759,419	54,833	106,471,192	3,648,031	1,221,001
Continental.....	1,990	3,620,077	11,463	16,946,006	587,867	131,693
Crown.....	2,753	5,674,113	14,433	24,336,312	848,576	162,387
Dominion.....	4,886	10,923,602	22,859	42,931,662	1,480,184	326,062
T. Eaton.....	13	20,118,000	13	17,964,000	38,480	11,000
Excelsior.....	4,446	9,344,590	24,361	39,149,941	1,283,029	312,632
Great West.....	22,058	50,516,708	114,892	246,828,723	7,808,010	1,363,820
Imperial.....	9,017	25,711,304	46,460	98,076,951	3,495,503	727,050
London.....	65,655	28,244,682	283,956	96,468,575	3,505,934	628,636
Manufacturers.....	12,636	30,484,639	63,886	118,734,253	4,003,759	910,551
Monarch.....	2,769	6,519,140	11,615	24,287,713	755,386	58,500
Mutual of Canada.....	18,335	44,490,768	102,509	199,067,869	7,526,686	1,959,399
National of Canada.....	2,431	6,005,197	14,591	28,582,089	931,833	291,755
North American.....	9,718	20,616,507	49,987	89,302,350	3,040,920	1,030,602
Northern.....	2,778	5,646,200	14,124	21,271,467	755,182	139,286
Saskatchewan.....	323	751,555	1,890	3,929,924	128,904	18,500
Sauvegarde.....	1,187	1,782,848	7,229	9,106,821	289,015	59,750
Security.....	1,246	1,775,115	3,368	3,802,637	103,097	11,212
Sovereign.....	1,293	2,893,958	6,798	13,917,726	413,394	84,500
Sun.....	20,141	54,128,002	141,074	261,375,478	8,923,175	2,427,477
Travellers of Canada.....	1,715	3,387,191	6,378	9,921,726	355,590	40,250
Western.....	401	996,600	1,836	4,007,307	120,736	33,000
<b>Total.....</b>	<b>208,512</b>	<b>397,553,184</b>	<b>1,079,146</b>	<b>1,664,348,605</b>	<b>57,205,082</b>	<b>14,626,037</b>
<b>British Companies—</b>						
Commercial Union.....	3	14,000	167	583,200	17,160	11,955
Edinburgh <sup>2</sup> .....	—	—	11	22,703	258	—
Gresham.....	724	2,028,177	3,062	7,037,713	225,002	65,983
Life Association of Scotland <sup>2</sup> .....	—	—	135	265,189	4,170	21,633
Liverpool and London and Globe <sup>2</sup> .....	—	—	63	110,188	2,482	18,585
London and Scottish.....	704	1,798,754	8,465	17,167,104	554,012	438,933
Mutual Life and Citizens (Australia).....	11,217	3,034,210	21,515	5,392,390	201,165	26,438
North British and Mercantile.....	57	290,635	505	1,573,535	57,812	43,665
Norwich Union <sup>2</sup> .....	—	—	65	90,727	2,540	—
Phoenix of London.....	169	659,000	2,853	7,526,145	232,720	159,483
Royal.....	823	4,636,213	4,489	14,993,204	735,855	184,320
Scottish Amicable <sup>2</sup> .....	—	—	17	43,021	658	4,666
Scottish Provident <sup>2</sup> .....	—	—	8	23,479	173	8,015
Standard.....	1,046	3,506,394	9,739	21,921,824	737,300	777,934
Star <sup>2</sup> .....	—	—	97	132,668	4,792	20,879
<b>Total.....</b>	<b>14,743</b>	<b>15,967,383</b>	<b>50,691</b>	<b>76,883,090</b>	<b>2,776,099</b>	<b>1,782,399</b>
<b>Foreign Companies—</b>						
Ætna.....	1,593	18,892,552	15,447	54,663,564	1,332,852	995,765
Connecticut Mutual <sup>2</sup> .....	—	—	464	959,617	21,852	64,195
Equitable.....	1,785	8,822,024	15,469	41,389,145	1,410,947	625,157
Guardian.....	3	5,500	56	224,468	10,623	200
Metropolitan.....	277,711	105,256,940	1,587,479	407,602,833	13,892,959	3,212,824
Mutual of New York.....	2,790	9,420,781	19,703	51,306,888	1,869,998	735,812
National of United States <sup>2</sup> .....	—	—	37	22,320	127	2,637
New York.....	8,487	22,563,075	54,798	115,475,957	4,169,799	1,347,267
Northwestern Mutual <sup>2</sup> .....	—	—	64	64,553	1,236	13,150
Phoenix Mutual <sup>2</sup> .....	—	—	190	149,240	20,959	67,889
Prudential Savings <sup>2</sup> .....	—	—	627	961,866	30,920	37,966
Prudential.....	136,022	40,868,324	731,423	174,970,086	5,883,245	1,047,224
State.....	1	5,000	653	1,521,962	40,813	51,500
Travelers of Hartford.....	3,173	21,299,332	13,117	56,676,467	1,219,621	617,657
Union Mutual.....	347	1,085,000	4,267	9,017,036	304,048	138,425
United States.....	9	39,000	372	787,796	26,867	18,758
<b>Total.....</b>	<b>431,921</b>	<b>228,257,528</b>	<b>2,444,166</b>	<b>915,793,798</b>	<b>30,236,866</b>	<b>9,036,326</b>
<b>Canadian Companies.....</b>	<b>208,512</b>	<b>397,553,184</b>	<b>1,079,146</b>	<b>1,664,348,605</b>	<b>57,205,082</b>	<b>14,626,037</b>
<b>British Companies.....</b>	<b>14,743</b>	<b>15,967,383</b>	<b>50,691</b>	<b>76,883,090</b>	<b>2,776,099</b>	<b>1,782,399</b>
<b>Foreign Companies.....</b>	<b>431,921</b>	<b>228,257,528</b>	<b>2,444,166</b>	<b>915,793,798</b>	<b>30,236,866</b>	<b>9,036,326</b>
<b>Grand Total.....</b>	<b>655,176</b>	<b>641,778,095</b>	<b>3,574,003</b>	<b>2,657,025,493</b>	<b>90,218,047</b>	<b>25,444,762</b>

<sup>1</sup>Including matured endowments.<sup>2</sup>Ceased transacting new business in Canada.



## 84.—Progress of Life Insurance in Canada, 1916-1920.

Items.	1916.	1917.	1918.	1919.	1920.
<b>Canadian Companies—</b>					
Policies new and taken up.....No.	120,759	135,145	132,585	198,527	208,512
Policies in force at end of year.....“	675,634	744,239	811,891	947,489	1,079,146
Policies become claims.....“	9,912	11,633	16,501	13,106	12,062
Amount of policies new and taken up \$	138,201,281	172,703,621	179,429,315	320,150,705	397,553,184
Net amount of policies in force.....\$	895,523,435	996,699,282	1,105,503,447	1,362,631,562	1,664,348,605
Net amount of policies become claims.....\$	11,763,328	13,183,223	18,926,307	14,373,721	14,626,037
Amount of premiums in year.....\$	30,296,416	34,599,199	38,728,815	47,126,374	57,205,082
Claims paid <sup>1</sup> .....\$	10,537,141	12,636,011	16,063,901	17,454,054	14,491,847
Unsettled claims—					
Not resisted.....\$	2,394,825	2,865,751	5,414,116	1,902,639	1,845,777
Resisted.....\$	114,972	101,332	24,504	62,993	29,154
<b>British Companies—</b>					
Policies new and taken up.....No.	6,901	7,849	6,877	8,756	14,743
Policies in force at end of year.....“	33,293	36,389	38,040	42,232	50,691
Policies become claims.....“	821	798	956	935	897
Amount of policies new and taken up \$	5,250,633	5,109,183	5,969,013	11,264,394	15,967,383
Net amount of policies in force.....\$	59,151,931	58,617,506	60,296,113	66,908,064	76,883,090
Net amount of policies become claims.....\$	1,801,022	1,521,921	1,674,214	1,803,020	1,782,399
Amount of premiums in year.....\$	1,903,590	1,957,143	1,935,219	2,201,462	2,776,099
Claims paid <sup>1</sup> .....\$	1,693,628	1,561,113	1,466,069	1,895,928	1,918,850
Unsettled claims—					
Not resisted.....\$	408,571	341,361	519,175	382,258	233,254
Resisted.....\$	50,594	50,686	53,000	2,208	—
<b>Foreign Companies—</b>					
Policies new and taken up.....No.	330,008	354,760	393,645	433,968	431,921
Policies in force at end of year.....“	1,474,455	1,681,202	1,942,045	2,200,603	2,444,166
Policies become claims.....“	16,708	19,565	30,005	27,144	29,294
Amount of policies new and taken up \$	87,649,711	104,307,626	127,853,228	193,128,530	228,257,528
Net amount of policies in force.....\$	467,499,266	529,725,775	619,261,713	758,297,691	915,793,798
Net amount of policies become claims.....\$	6,695,184	7,470,501	9,381,768	8,339,561	9,036,326
Amount of premiums in year.....\$	15,893,099	18,287,267	20,977,013	25,380,673	30,236,866
Claims paid <sup>1</sup> .....\$	6,488,908	7,245,838	8,717,631	8,727,110	9,307,381
Unsettled claims—					
Not resisted.....\$	669,138	822,358	1,359,971	852,393	511,363
Resisted.....\$	122,597	132,163	67,627	41,199	138,278
<b>All Companies—</b>					
Policies new and taken up.....No.	457,668	497,754	533,107	641,251	655,176
Policies in force at end of year.....“	2,183,382	2,461,830	2,791,976	3,190,324	3,574,003
Policies become claims.....“	27,441	31,996	47,462	41,186	42,253
Amount of policies new and taken up \$	231,101,625	282,120,430	313,251,556	524,543,629	641,778,099
Net amount of policies in force.....\$	1,422,179,632	1,585,042,563	1,785,061,273	2,187,837,317	2,657,025,493
Net amount of policies become claims.....\$	20,259,534	22,175,645	29,982,289	24,516,302	25,444,762
Amount of premiums in year.....\$	48,093,105	54,843,609	61,641,047	74,708,509	90,218,047
Claims paid <sup>1</sup> .....\$	18,719,677	21,442,962	26,247,601	28,077,092	25,718,078
Unsettled claims—					
Not resisted.....\$	3,472,534	4,029,470	7,293,262	3,137,290	2,590,394
Resisted.....\$	288,163	284,181	145,131	106,400	167,432

Including matured endowments.

## 85.—Insurance Death-rate in Canada, 1917-1920.

Companies.	1917.			1918.		
	Number of lives exposed to risk.	Number of deaths.	Death-rate per 1,000.	Number of lives exposed to risk.	Number of deaths.	Death-rate per 1,000.
Active companies, ordinary.....	794,720	8,999	11.3	880,859	13,011	14.8
Active companies, industrial.....	1,538,092	16,240	10.6	1,762,147	23,657	13.4
Assessment and fraternal societies.....	91,413	1,504	16.5	115,360	2,112	18.3
Non-active and retired companies.....	2,449	92	37.6	2,284	107	46.8
<b>Total.....</b>	<b>2,426,674</b>	<b>26,835</b>	<b>11.1</b>	<b>2,760,650</b>	<b>38,887</b>	<b>14.1</b>
	1919.			1920.		
	Number of lives exposed to risk.	Number of deaths.	Death-rate per 1,000.	Number of lives exposed to risk.	Number of deaths.	Death-rate per 1,000.
Active companies, ordinary.....	1,008,389	7,581	7.5	1,177,608	8,125	6.9
Active companies, industrial.....	1,989,367	16,548	8.3	2,215,815	18,634	8.4
Assessment and fraternal societies.....	151,085	1,909	12.6	206,066 <sup>1</sup>	2,643	12.8
Non-active and retired companies.....	2,125	118	55.5	1,974	173	87.6
<b>Total.....</b>	<b>3,150,966</b>	<b>26,156</b>	<b>8.3</b>	<b>3,601,463</b>	<b>29,575</b>	<b>8.2</b>

NOTE.—Average death-rate for all companies in the twenty years 1901-1920 was 9.9.

<sup>1</sup>Figures incomplete.

## 86.—Assets of Canadian Life Companies and Assets in Canada of Life Companies other than Canadian Companies, 1916-1920.

Items.	1916.	1917.	1918.	1919.	1920.
<b>Canadian Companies—</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Real estate.....	15,052,552	17,405,495	16,297,408	16,791,000	17,170,659
Loans on real estate.....	95,921,380	92,703,648	90,653,299	91,325,101	103,895,691
Loans on collaterals.....	2,501,710	1,279,931	1,225,805	1,761,166	1,632,839
Cash loans and premium obligations on policies in force.....	41,134,378	42,749,481	43,884,451	44,611,927	49,303,632
Stocks, bonds and debentures.....	125,686,429	149,578,220	179,671,910	204,689,727	227,785,014
Interest and rent due and accrued.....	7,191,937	7,329,915	7,442,414	8,061,833	9,266,513
Cash on hand and in banks <sup>1</sup> .....	3,678,529	4,194,956	3,903,597	2,403,405	2,924,976
Outstanding and deferred premiums.....	6,611,933	7,246,081	7,818,704	9,019,887	11,120,733
Other assets.....	299,405	257,072	209,302	293,744	150,486
<b>Total assets.....</b>	<b>298,078,258</b>	<b>322,744,799</b>	<b>351,106,890</b>	<b>378,907,790</b>	<b>423,251,193</b> <sup>2</sup>
<b>British Companies—</b>					
Real estate.....	968,794	975,987	1,112,914	1,306,036	917,498
Loans on real estate.....	16,942,175	15,738,404	14,222,507	12,998,447	12,727,404
Loans on collaterals.....	156,943	160,169	166,934	18,770	12,165
Cash loans and premium obligations on policies in force.....	2,655,840	2,543,442	2,532,382	2,446,603	2,602,592
Stocks, bonds and debentures.....	15,998,950	16,001,299	17,819,067	20,036,680	19,636,657
Interest and rent due and accrued.....	432,307	435,110	463,106	417,433	402,639
Cash on hand and in banks <sup>1</sup> .....	788,602	682,031	677,197	756,488	777,234
Outstanding and deferred premiums.....	344,215	335,650	354,537	350,585	387,443
Other assets.....	18,040	34,067	373,187	35,820	57,369
<b>Total assets in Canada.....</b>	<b>38,305,866</b>	<b>36,906,159</b>	<b>37,721,331</b>	<b>38,366,862</b>	<b>37,521,001</b>
<b>Foreign Companies—</b>					
Real estate.....	79,840	83,085	120,295	221,013	218,132
Loans on real estate.....	11,087,153	10,834,482	10,639,987	10,063,742	9,143,873
Loans on collaterals.....	none	none	30,627	none	15,000
Cash loans and premium obligations on policies in force.....	10,777,910	11,026,169	11,172,030	11,318,518	12,023,992
Stocks, bonds and debentures.....	55,146,616	62,404,175	71,502,264	86,090,541	99,409,049
Interest and rent due and accrued.....	1,151,210	1,270,588	1,309,586	1,390,927	1,518,272
Cash on hand and in banks <sup>1</sup> .....	2,537,267	4,232,739	1,997,886	2,077,111	3,919,390
Outstanding and deferred premiums.....	1,852,317	1,497,861	1,828,015	2,296,416	2,808,887
Other assets.....	9,846	none	6,498	16,281	16,293
<b>Total assets in Canada.....</b>	<b>82,142,159</b>	<b>91,349,149</b>	<b>98,607,188</b>	<b>113,474,549</b>	<b>129,072,888</b>

<sup>1</sup>Includes cash deposit with Government.<sup>2</sup>The figure in the text is the book value; the market value of these assets was \$348,709,244 in 1918, \$376,604,050 in 1919 and \$420,018,399 in 1920.

NOTE.—Certain British Companies transacting fire insurance in Canada transact also life insurance in Canada, and inasmuch as a separation of assets has not been made between these two classes, their assets in Canada are not here included, but are included in the assets of British companies shown in Table 76 on page 745.

# 87.—Liabilities of Canadian Life Companies and Liabilities in Canada of Life Companies other than Canadian Companies, 1916-1920.

Schedule.	1916.	1917.	1918.	1919.	1920.
<b>Canadian Companies—</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Unsettled claims.....	3,768,275	4,557,929	7,752,308	3,920,563	3,505,478
Net re-insurance reserve.....	246,172,484	267,172,605	291,035,397	321,027,592	359,548,337
Sundry liabilities.....	8,668,836	10,738,527	11,560,484	16,220,206	19,478,309
<b>Total liabilities not including capital.....</b>	<b>258,609,595</b>	<b>282,469,061</b>	<b>310,348,189</b>	<b>341,168,361</b>	<b>382,532,124</b>
Surplus of assets excluding capital.....	39,468,663	40,275,738	38,361,055	35,435,689	37,486,275
Capital stock paid up.....	5,680,106	5,740,583	5,921,342	5,980,407	6,166,044
<b>British Companies—</b>					
Unsettled claims.....	459,164	392,046	572,175	384,466	233,253
Net re-insurance reserve.....	19,267,700	18,888,809	19,075,622	19,361,479	20,483,379
Sundry liabilities.....	121,208	140,405	67,198	157,757	201,123
<b>Total liabilities not including capital.....</b>	<b>19,848,072</b>	<b>19,421,260</b>	<b>19,714,995</b>	<b>19,903,702</b>	<b>20,917,755</b>
Surplus of assets.....	18,457,794 <sup>2</sup>	17,484,899 <sup>2</sup>	18,006,836	18,463,160	16,682,334
<b>Foreign Companies<sup>1</sup>—</b>					
Unsettled claims.....	791,735	954,520	1,427,598	893,592	649,641
Net re-insurance reserve.....	74,997,533	82,516,873	92,346,507	104,220,027	114,561,395
Sundry liabilities.....	1,988,928	2,282,503	3,515,199	3,621,881	4,413,133
<b>Total liabilities not including capital.....</b>	<b>77,778,196</b>	<b>85,753,896</b>	<b>97,289,304</b>	<b>108,735,500</b>	<b>119,624,169</b>
Surplus of assets.....	4,363,963	5,595,253	1,317,884	4,739,049	9,448,719
<b>All Companies—</b>					
Unsettled claims.....	5,019,174	5,904,495	9,752,081	5,198,621	4,388,372
Net re-insurance reserve.....	340,437,717	368,578,287	402,457,526	444,609,098	494,593,111
Sundry liabilities.....	10,778,972	13,161,435	15,142,881	19,999,844	24,092,565
<b>Total liabilities not including capital.....</b>	<b>356,235,863</b>	<b>387,644,217</b>	<b>427,352,488</b>	<b>469,807,563</b>	<b>523,074,048</b>
Surplus of assets excluding capital.....	62,290,420	63,355,890	57,685,775	58,637,898	63,617,328
Capital stock paid up <sup>3</sup> .....	5,680,106	5,740,583	5,921,342	5,980,407	6,166,044

<sup>1</sup>Liabilities in Canada.    <sup>2</sup>Incomplete.    <sup>3</sup>Canadian companies only.

# 88.—Cash Income and Expenditure of Canadian Life Companies and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1916-1920.

Schedule.	1916.	1917.	1918.	1919.	1920.
<b>INCOME.</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Canadian Companies—</b>					
Net premium income.....	41,626,425	46,997,715	53,188,261	64,433,449	78,725,400
Consideration for annuities.....	2,332,401	1,448,569	1,622,847	2,519,957	2,075,407
Interest and dividends on stocks, etc....	16,004,312	17,637,462	18,986,651	19,911,623	21,631,593
Sundry items.....	287,869	148,946	1,479,332	1,766,153	2,207,453
<b>Total cash income.....</b>	<b>60,251,007</b>	<b>66,232,692</b>	<b>75,277,091</b>	<b>88,631,182</b>	<b>104,639,853</b>
<b>British Companies—</b>					
Net premium income.....	1,903,433	1,956,835	1,935,219	2,201,462	2,776,099
Consideration for annuities.....	158	308	9,771	1,050	131
Interest and dividends on stocks, etc....	1,889,512	1,936,229	1,851,191	1,977,211	1,838,218
Sundry items.....	712	-102	14,797	86,640	337,771
<b>Total cash income<sup>1</sup>.....</b>	<b>3,793,815</b>	<b>3,893,270</b>	<b>3,810,978</b>	<b>4,266,363</b>	<b>4,952,219</b>
<b>Foreign Companies—</b>					
Net premium income.....	15,830,132	18,138,725	20,977,014	25,380,673	30,236,866
Consideration for annuities.....	62,968	148,542	15,750	40,066	21,059
Interest and dividends on stocks, etc....	3,944,510	4,215,168	4,747,572	5,189,215	5,890,062
Sundry items.....	49,538	41,170	375,416	431,784	630,860
<b>Total cash income<sup>1</sup>.....</b>	<b>19,887,148</b>	<b>22,543,605</b>	<b>26,115,752</b>	<b>31,041,738</b>	<b>36,778,847</b>

<sup>1</sup>Income and expenditure in Canada.

**88.—Cash Income and Expenditure of Canadian Life Companies and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1916-1920—concluded.**

Schedule.	1916.	1917.	1918.	1919.	1920.
<b>EXPENDITURE.</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Canadian Companies—					
Payments to policyholders.....	24,147,117	27,570,554	33,137,434	38,477,058	36,986,070
General expenses.....	12,253,485	14,017,950	16,170,006	21,912,380	26,755,643
Dividends to stockholders.....	510,816	549,005	553,192	558,021	957,077
<b>Total expenditure.....</b>	<b>36,911,418</b>	<b>42,137,509</b>	<b>49,860,632</b>	<b>60,947,459</b>	<b>64,698,790</b>
Excess of income over expenditure.....	23,339,589	24,095,183	25,416,459	27,683,723	39,941,063
British Companies—					
Payments to policyholders.....	1,990,050	1,997,904	1,706,934	2,149,843	2,407,707
General expenses.....	485,907	494,348	530,003	667,253	1,065,870
Dividends to stockholders.....	—	—	—	—	—
<b>Total expenditure<sup>1</sup>.....</b>	<b>2,475,957</b>	<b>2,492,252</b>	<b>2,236,937</b>	<b>2,817,096</b>	<b>3,473,577</b>
Excess of income over expenditure.....	1,317,858	1,401,018	1,574,041	1,449,267	1,478,642
Foreign Companies—					
Payments to policyholders.....	9,549,992	10,417,237	11,969,716	12,386,608	14,044,279
General expenses.....	3,728,182	4,442,426	5,756,211	7,149,276	8,039,873
Dividends to stockholders.....	—	—	—	—	—
<b>Total expenditure<sup>1</sup>.....</b>	<b>13,278,174</b>	<b>14,859,663</b>	<b>17,725,927</b>	<b>19,535,884</b>	<b>22,084,152</b>
Excess of income over expenditure.....	6,608,974	7,683,942	8,389,825	11,505,854	14,694,695

<sup>1</sup>Income and expenditure in Canada.

**89.—Net Amount of Dominion Life Insurance in force in Life Companies in Canada, 1915-1920.**

Companies.	1915.	1916.	1917.	1918.	1919.	1920.
	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Canadian.....	829,972,809	895,528,435	996,699,282	1,105,503,447	1,362,631,562	1,664,348,605
British.....	58,087,018	59,151,931	58,617,506	60,296,113	66,908,064	76,883,090
Foreign.....	423,556,850	467,499,266	529,725,775	619,261,713	758,297,691	915,793,798
<b>All.....</b>	<b>1,311,616,677</b>	<b>1,422,179,632</b>	<b>1,585,042,563</b>	<b>1,785,061,273</b>	<b>2,187,837,317</b>	<b>2,657,025,493</b>

**90.—Premium Income of Life Companies, 1915-1920.**

Companies.	1915.	1916.	1917.	1918.	1919.	1920.
	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Canadian.....	23,546,303	30,296,416	34,599,199	38,728,815	47,126,374	57,205,082
British.....	2,071,592	1,903,590	1,957,143	1,935,219	2,201,462	2,776,099
Foreign.....	14,488,783	15,893,099	18,287,267	20,977,013	25,380,673	30,236,866
<b>All.....</b>	<b>45,106,678</b>	<b>48,093,105</b>	<b>54,843,609</b>	<b>61,641,047</b>	<b>74,708,509</b>	<b>90,218,047</b>



## 91.—Life Insurance on Assessment Plan, 1916-1920.

Items.	1916.	1917.	1918.	1919.	1920. <sup>1</sup>
Number certificates taken.....	3,897	7,991	7,193	12,155	14,234
Number certificates become claims.....	2,243	2,550	2,647	2,786	2,773
	\$	\$	\$	\$	\$
Amount paid by members.....	1,931,898	5,776,737	2,679,637	2,654,835	2,691,826
Amount of certificates new and taken up..	3,299,250	6,301,236	5,497,819	10,405,843	12,727,091
Net amount in force.....	91,681,224	109,691,288	129,053,773	134,055,399	137,057,828
Amount of certificates become claims.....	2,202,484	2,594,937	2,555,462	2,643,671	2,636,213
Claims paid.....	2,147,515	2,468,652	3,037,860	2,997,753	2,723,725
Unsettled claims—					
Not resisted.....	297,160	375,907	387,193	180,919	192,715
Resisted.....	5,500	1,000	2,500	1,922	2,000
Amount terminated by—					
Death.....	1,482,851	1,825,695	4,381,610	1,900,633	1,868,508
Surrender, expiry, or lapse, etc.....	11,928,616	8,266,146	14,849,510	12,163,679	10,961,533
<b>Total terminated.....</b>	<b>13,411,467</b>	<b>10,091,841</b>	<b>19,231,120</b>	<b>14,064,312</b>	<b>12,830,041</b>
<b>Assets—</b>					
Real estate.....	1,061,139	880,685	1,428,123	1,357,738	1,376,462
Loans on real estate.....	7,430,142	9,776,409	7,789,646	7,418,138	7,445,923
Policy loans (liens arising out of re-adjustment).....	18,579,639	25,567,695	26,013,580	24,000,472	23,406,179
Stocks, bonds and debentures.....	13,713,387	14,443,905	16,303,729	20,307,673	21,825,835
Cash on hand and in banks.....	749,659	993,669	264,221	609,790	478,693
Interest and rent due and accrued.....	464,285	590,270	747,850	650,515	721,046
Dues from members.....	93,364	164,970	164,346	235,262	211,553
Other assets.....	2,679,196	1,292,675	4,316,012	4,976,927	4,993,270
<b>Total assets.....</b>	<b>44,770,811</b>	<b>53,710,278</b>	<b>57,027,507</b>	<b>59,556,515<sup>2</sup></b>	<b>60,456,941</b>
<b>Liabilities—</b>					
Claims, unsettled.....	485,903	594,129	590,647	305,672	279,971
Reserve <sup>3</sup> .....	43,241,755	48,963,644	53,550,029	54,187,476	55,327,610
Due on account of general expenses.....	4,962	20,722	2,159,159	1,063,370	514,684
Other liabilities.....	78,086	3,210,032			
<b>Total liabilities.....</b>	<b>43,810,736</b>	<b>52,788,527</b>	<b>56,299,835</b>	<b>55,556,518</b>	<b>56,122,265</b>
<b>Income—</b>					
Assessments.....	3,981,676	11,316,586	5,595,406	5,308,692	5,441,478
Fees and dues.....	242,928	316,293	173,837	378,641	415,759
Interest and rents.....	2,051,224	2,230,332	2,579,591	2,482,912	2,549,961
Other receipts.....	65,113	31,197	15,727	136,408	52,839
<b>Total income.....</b>	<b>6,340,941</b>	<b>13,894,408</b>	<b>8,364,561</b>	<b>8,306,653</b>	<b>8,460,037</b>
<b>Expenditure—</b>					
Paid to members.....	4,468,362	5,336,489	6,269,903	6,007,306	5,547,411
General expenses.....	446,683	778,301	1,091,611	1,150,358	1,311,921
<b>Total expenditure.....</b>	<b>4,915,045</b>	<b>6,114,790</b>	<b>7,361,514</b>	<b>7,157,664</b>	<b>6,859,332</b>
Excess of income over expenditure.....	1,425,896	7,779,618	1,003,047	1,148,989	1,600,705

<sup>1</sup>Canadian Fraternal Benefit Societies only.<sup>2</sup>The figure in the text is the book value; the market value of these assets was \$57,052,508 in 1919 and \$57,965,864 in 1920.<sup>3</sup>Independent Order of Foresters, \$41,833,439 in 1916, \$43,763,143 in 1917, \$43,803,952 in 1918 and \$44,031,640 in 1919, including a special reserve of \$500,000 in 1916, \$1,000,000 in 1917, \$1,600,000 in 1918, \$1,000,000 in 1919 and \$1,000,000 in 1920.<sup>4</sup>As a result of an amendment to the Insurance Act, becoming effective January 1, 1920, it became necessary for all foreign fraternal societies then transacting business in Canada under provincial licenses to obtain licenses under the Insurance Act in order to be permitted to continue to issue new insurance in Canada. Ten societies having \$65,700,477 of Canadian insurance in force have complied with this requirement, so that Dominion fraternal insurance in Canada on December 31, 1920, totalled \$202,758,305.

## 92.—Dominion and Provincial Life Insurance in Canada, 1920.

Business transacted by	New policies issued (gross).	Net in force Dec. 31, 1920.	Net premiums received.	Net death claims paid.
	\$	\$	\$	\$
1. Dominion licensees—				
(a) Life companies.....	698,875,950	2,657,025,493	90,424,293 <sup>1</sup>	25,958,214
(b) Fraternal.....	17,050,791	202,758,305	3,736,822	3,652,824
<b>Totals.....</b>	<b>715,926,741</b>	<b>2,859,783,798</b>	<b>94,161,115<sup>1</sup></b>	<b>29,611,038</b>
2. Provincial licensees—				
(a) Provincial companies within province by which they are incorporated.				
(i) Life companies.....	4,460,566	14,056,022	432,717	60,434
(ii) Fraternal.....	3,499,929	99,671,928	2,096,149	1,898,572
(b) Provincial companies in provinces other than those by which they are incorporated.				
(i) Life companies.....	1,290,950	3,905,264	106,744	15,818
(ii) Fraternal.....	3,836,800	57,107,001	647,059	567,193
<b>Totals for Provincial companies.....</b>	<b>13,088,245</b>	<b>174,740,215</b>	<b>3,282,669</b>	<b>2,542,017</b>
<b>Grand Totals.....</b>	<b>729,014,986</b>	<b>3,034,524,013</b>	<b>97,443,784</b>	<b>32,153,055</b>

<sup>1</sup>Includes \$206,246 received as consideration for annuities.

## Miscellaneous Insurance.

Since 1875 the growth of insurance business other than fire or life has been a steady one. The report of the Superintendent of Insurance for the calendar year 1880, shows that the number of companies duly licensed for the transaction of accident, guarantee, plate glass and steam boiler insurance—the only four classes of miscellaneous insurance then transacted—was 5, 3, 1 and 1 respectively. The same report for the year 1920 shows that miscellaneous insurance now includes in Canada, accident, sickness, automobile, burglary, explosion, forgery, guarantee, hail, inland transportation, employers' liability, aviation, plate glass, sprinkler leakage, steam boiler, title, tornado and live stock insurance, etc. Whereas in 1880, 10 companies transacted business of this kind, such insurance is now sold by 120 companies, of which 30 are Canadian, 32 British and 58 foreign. In addition to these there were 7 fraternal orders or societies which in 1920 carried on sickness as well as life insurance.

**Accident Insurance.**—The first license of this kind was issued to the Travellers Co. of Hartford, Conn., in 1868. The first license to a Canadian Co. was that issued to the Accident Insurance Co. of Canada, which was organized in 1872 and commenced business in 1874. Much accident insurance has also been sold by companies doing primarily a life insurance business.

**Automobile Insurance.**—This is now one of the most important branches of the miscellaneous class of insurance. Premiums increased from \$80,446 in 1910 to \$573,604 in 1915, and to \$5,164,897 in 1920, with an increase in the number of companies from 7 to 73 during the 10 year period.

**Plate Glass Insurance.**—Policies were first sold in Canada by the Metropolitan Plate Glass Insurance Co., an American concern which withdrew from Canada during 1882 to avoid business restrictions. The 26 companies operating in Canada in 1920 received premiums of \$690,476 and paid claims of \$409,393, with unsettled claims of \$49,093 outstanding.

**Burglary Insurance.**—This type of insurance received but slight attention in Canada until 1918. In 1893, however, one company issued burglary policies. A second followed in 1905, and in 1910 five companies were operating, while at the end of 1920, 22 companies were licensed to do burglary business. For 1920 the premium income of all companies amounted to \$481,019, and the losses paid amounted to \$203,983, with unsettled claims of \$67,930 outstanding at the end of the year.

### 93.—Insurance other than Fire and Life, 1920.

Companies.	Premiums.	Losses incurred.	Claims paid.	Unsettled Claims.	
				Not resisted.	Resisted.
	\$	\$	\$	\$	\$
Guarantee.....	1,273,514	370,681	178,194	327,737	106,450
Personal Accident.....	2,341,214	911,620	948,679	253,605	600
Personal Accident and Sickness.....	1,073,158	547,740	543,358	89,042	120
Employers' Liability.....	3,162,518	1,674,409	1,542,198	982,322	80,175
Sickness.....	1,575,548	1,068,450	1,074,032	187,002	500
Burglary.....	481,019	244,166	203,983	59,435	8,495
Steam Boiler.....	323,485	17,524	16,130	3,639	11,767
Hail.....	5,800,026	2,371,270	2,377,799	3,858	none
Inland Transportation.....	423,663	234,794	222,720	48,517	none
Plate Glass.....	690,476	412,151	409,393	48,739	300
Automobile <sup>1</sup> .....	2,325,785	1,222,401	1,149,364	218,181	3,810
Automobile <sup>2</sup> .....	2,939,112	1,644,058	1,534,396	467,404	70,445
Sprinkler Leakage.....	98,804	68,491	72,753	14,169	none
Live Stock.....	112,816	53,060	49,587	8,992	none
Tornado.....	158,321	39,155	155,931	42,443	none
Explosion.....	148,525	none	none	none	none
Forgery.....	636	none	none	none	none

<sup>1</sup>Including fire risk.

<sup>2</sup>Excluding fire risk.

### 94.—Income and Expenditure and Assets and Liabilities of Canadian Companies doing Insurance Business other than Fire and Life, 1920.

Companies.	Cash Income.	Cash Expenditure.	Excess of Income over Expenditure.	Assets.	Liabilities.	Excess of Assets over Liabilities.
	\$	\$	\$	\$	\$	\$
Boiler Inspection.....	153,051	112,829	40,222	441,948	156,127	285,821
Casualty Co. of Canada.....	30,952	27,221	3,731	55,918	22,148	33,770
Chartered Trust and Executor Co.....	132,936	138,474	-5,538	587,950	81,234	506,716
Dominion-Gresham.....	282,167	269,819	12,348	385,252	129,743	255,509
General Animals.....	127,509	121,991	5,518	86,552	49,600	36,952
Guarantee Co. of N.A.....	456,552	359,424	97,128	2,653,331	531,197	2,122,134
Merchants Casualty Co.....	609,537	551,757	57,780	346,939	161,352	185,587
Merchants' and Employers' Guarantee and Accident.....	255,334	254,263	1,071	190,940	114,798	76,142
Protective Association of Canada.....	227,318	211,017	16,301	98,300	71,244	27,056
<b>Total.....</b>	<b>2,275,356</b>	<b>2,046,795</b>	<b>228,561</b>	<b>4,847,130</b>	<b>1,317,443</b>	<b>3,529,687</b>

<sup>1</sup>Not including capital stock.

**95.—Income and Expenditure in Canada of Companies, other than Canadian, doing Business other than Fire and Life, 1920.**

Companies.	Income (Cash).			Expenditure (Cash).			
	Pre- miums.	Interest and Divi- dends on Stock.	Total Cash Income.	Paid for Losses.	General Expendi- ture.	Total Cash Expendi- ture.	Excess of Income over Expendi- ture.
	\$	\$	\$	\$	\$	\$	\$
Abeille.....	136,489	none	136,489	75,062	46,943	122,005	14,484
American and Foreign Marine.....	31,279	1,430	32,709	393	5,839	6,232	26,477
American Surety.....	68,234	4,000	72,234	6,284	12,421	18,705	53,529
British and Foreign Marine.....	2,215	4,680	6,895	1,465	415	1,881	5,014
Continental Casualty.....	126,970	29	127,025 <sup>1</sup>	42,910	87,949	130,859	— 3,834
Excess.....	173,601	50	173,651	69,660	58,410	128,070	45,581
Federal.....	113,239	226	113,465	51,398	35,041	86,439	27,026
Fidelity and Casualty.....	296,324	14,558	310,882	209,702	155,755	365,457	—54,575
Hartford Accident.....	none	4,444	4,444	none	2,422	2,422	2,022
Hartford Live Stock.....	none	750	750	none	1,397	1,397	— 647
Hartford Steam Boiler.....	1,300	1,350	2,650	none	none	none	2,650
International Fidelity.....	7,021	none	7,021	1,678	999	2,677	4,344
Lloyds Plate Glass.....	80,262	4,188	84,450	53,490	40,110	93,600	— 9,150
Loyal Protective.....	207,007 <sup>2</sup>	2,881	209,888	107,207	92,459 <sup>3</sup>	199,666	10,222
Lumbermen's Mutual Casualty.....	650	578	1,228	none	414	414	814
Maryland Assurance.....	28,229	5,305	33,534	62,536	6,258	68,794	—35,260
Maryland Casualty.....	417,924	17,710	435,642 <sup>1</sup>	173,068	158,960	332,028	103,614
National Surety.....	106,255	10,022	116,277	30,542	46,966	77,508	38,769
New York Plate Glass.....	32,912	1,192	34,104	19,219	14,362	33,581	523
Ocean Marine.....	10,944	none.	10,944	3,218	3,104	6,322	4,622
Preferred Accident.....	32,023	2,870	34,893	15,428	25,513	40,941	—6,048
Ridgely Protective.....	72,444 <sup>2</sup>	1,874	74,318	37,809	15,253 <sup>3</sup>	53,062	21,256
Royal Indemnity.....	107,420	6,619	114,039	12,581	51,822	64,403	49,636
Security Mutual Casualty.....	11,086	2,308	13,475 <sup>1</sup>	4,829	960	5,789	7,686
Travelers' Indemnity Co., Hartford.....	413,468	19,245	432,791 <sup>1</sup>	158,979	195,838	354,817	77,974
Travelers' Insurance.....	596,095	none.	596,145 <sup>1</sup>	201,779	290,511	492,290	103,855
United Commercial Travel- ers.....	28,427	1,440	29,867	6,228	6,965	13,193	16,674
United States Fidelity and Guaranty.....	631,531	20,875	652,406	236,923	300,027	536,950	115,456
Western Casualty.....	29,037	975	30,012	9,034	20,117	29,151	861
<b>Total.....</b>	<b>3,762,386</b>	<b>129,599</b>	<b>3,892,228<sup>1</sup></b>	<b>1,591,423</b>	<b>1,677,230</b>	<b>3,268,653</b>	<b>623,575</b>

<sup>1</sup>Includes sundries.

<sup>2</sup>Including \$26,362 policy fees.

<sup>3</sup>Including \$26,362 policy fees retained by agents.

**96.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1920.**

Business transacted by	Net premiums received.	Net losses paid.
	\$	\$
1. Dominion licensees.....	22,927,620	10,478,517
2. Provincial licensees—		
(a) Provincial companies within provinces by which they are incorporated.....	2,309,937	1,360,231
(b) Provincial companies within provinces other than those by which they are incorporated.....	661,516	329,504
Total for Provincial Companies.....	2,971,453	1,689,735
<b>Grand Totals.....</b>	<b>25,899,073</b>	<b>12,168,252</b>



## 97.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1929.

## NET PREMIUMS RECEIVED.

Class of business.	Dominion Licensees.	Provincial Licensees.			Grand Totals.
		(a) Prov. Cos. within prov. by which they are incorp.	(b) Prov. Cos. within prov. other than those by which they are incorp.	Total Provincial Licensees.	
	\$	\$	\$	\$	\$
Accident.....	2,341,214	8,681	680	9,361	2,350,575
Accident and Sickness combined.....	1,073,158	101,546	90,901	192,447	1,265,605
(Fraternal).....	—	35,114	13,091	48,205	48,205
Automobile (including Fire risk).....	2,325,785	30,898	35,793	66,691	2,392,476
Automobile (excluding Fire risk).....	2,939,112	35,482	7,547	43,029	2,982,141
Burglary.....	481,019	13,990	15	14,005	495,024
Employers' Liability.....	3,162,518	165,626	—	165,626	3,328,144
Explosion.....	148,525	—	—	—	148,525
Funeral.....	—	129,105	—	129,105	129,105
(Fraternal).....	—	31,489	—	31,489	31,489
Forgery.....	636	—	—	—	636
Guarantee.....	1,272,514	38,446	7,646	46,092	1,318,606
Hail.....	5,800,026	487,426	238,664	726,090	6,526,116
Inland Transportation.....	423,663	—	—	—	423,663
Live Stock.....	112,816	19,566	11,754	31,320	144,136
Plate Glass.....	690,476	136,270	2,155	138,425	828,901
Sickness.....	1,575,548	5,900	83	5,983	1,581,531
(Fraternal).....	—	564,702	144,959	709,661	709,661
Sickness and Funeral combined (Fraternal).....	—	282,924	106,082	389,006	389,006
Sprinkler Leakage.....	98,804	—	—	—	98,804
Steam Boiler.....	323,485	—	—	—	323,485
Tornado.....	158,321	—	—	—	158,321
Weather.....	—	222,772	2,146	224,918	224,918
<b>Totals.....</b>	<b>22,927,620</b>	<b>2,309,937</b>	<b>661,516</b>	<b>2,971,453</b>	<b>25,899,073</b>

## NET LOSSES PAID

	\$	\$	\$	\$	\$
Accident.....	948,679	8,288	5,101	13,389	962,068
Accident and Sickness combined.....	543,358	43,565	31,544	75,109	618,467
(Fraternal).....	—	34,881	14,005	48,886	48,886
Automobile (including Fire risk).....	1,149,364	16,870	11,319	28,189	1,177,553
Automobile (excluding Fire risk).....	1,534,396	16,946	4,857	21,803	1,556,199
Burglary.....	203,983	7,232	—	7,232	211,215
Employers' Liability.....	1,542,198	104,713	—	104,713	1,646,911
Explosion.....	—	—	—	—	—
Forgery.....	—	—	—	—	—
Funeral.....	—	30,016	—	30,016	30,016
(Fraternal).....	—	92,601	—	92,601	92,601
Guarantee.....	178,194	7,593	77	7,670	185,864
Hail.....	2,377,799	146,292	82,324	228,616	2,606,415
Inland Transportation.....	222,720	—	—	—	222,720
Live Stock.....	49,587	7,153	4,555	11,708	61,295
Plate Glass.....	409,393	67,211	2,439	69,650	479,043
Sickness.....	1,074,032	2,825	—	2,825	1,076,857
(Fraternal).....	—	485,389	67,509	552,898	552,898
Sickness and funeral combined (Fraternal).....	—	87,914	105,433	193,347	193,347
Sprinkler Leakage.....	72,753	—	—	—	72,753
Steam Boiler.....	16,130	—	—	—	16,130
Tornado.....	155,931	—	—	—	155,931
Weather.....	—	200,742	341	201,083	201,083
<b>Totals.....</b>	<b>10,478,517</b>	<b>1,360,231</b>	<b>329,504</b>	<b>1,689,735</b>	<b>12,168,252</b>

### XIII.—ADMINISTRATION.

#### PARLIAMENTARY REPRESENTATION.

**Representation by Provinces.**—The four original provinces of the Dominion were Ontario, Quebec, Nova Scotia and New Brunswick, which were given parliamentary representation according to Section 37 of the British North America Act, 1867. By Imperial Orders in Council the provinces of British Columbia and Prince Edward Island were admitted into the Dominion, the former on July 20, 1871, by Order dated May 16, 1871, and the latter on July 1, 1873, by Order dated June 26, 1873. An Act of the Dominion Parliament of May 12, 1870 (33 Vict., c. 3), provided for the formation of the province of Manitoba out of Rupert's Land and the Northwest Territories, so soon as these should be admitted into the Dominion of Canada, which admission was effected by Imperial Order in Council dated June 23, 1870, taking effect on July 15, 1870. In consequence of doubts as to the legal validity of the Dominion Act of 1870 (33 Vict., c. 3), the Imperial Parliament passed an Act in 1871 (34-35 Vict., c. 28), making the Canadian Act valid and effectual.

**Parliament of Canada.**—The Parliament of the Dominion of Canada consists of the Senate with 96 members and of the House of Commons with 235 members, senators being appointed for life by the Governor General and members of the House of Commons being elected by the people. The ordinary legal limit of duration for each parliament is five years, but by Act of the Imperial Parliament (6-7 Geo. V., c. 19), passed June 1, 1916, and intituled an Act to amend the British North America Act, 1867, the duration of the 12th Parliament of Canada was extended until October 7, 1917. The 12th Parliament was dissolved by proclamation of the Governor General on October 6, 1917, and the 13th Parliament of Canada was elected on December 17, 1917. A Redistribution Act passed after each census readjusts the number of representatives in the House of Commons in accordance with rules laid down in Section 51 of the British North America Act, 1867, of the Imperial Parliament (30-31 Vict., c. 3). These rules provide that the province of Quebec shall always have a fixed number of 65 members, and that there shall be assigned to each of the other provinces such a number of members as will bear the same proportion to the number of its population (ascertained by the census) as the number 65 bears to the population of Quebec. However, by an amendment to the British North America Act passed by the Imperial Parliament in 1915 (5-6 Geo. V., c. 45), it was enacted that "notwithstanding anything in the said Act, a province shall always be entitled to a number of members in the House of Commons not less than the number of senators representing such province." As a consequence of this amendment the representation of Prince Edward Island has remained at 4 members.

**The Senate.**—The numerical representation of the Senate by provinces is as follows: Prince Edward Island 4, Nova Scotia 10, New Brunswick 10, Quebec 24, Ontario 24, Manitoba 6, Saskatchewan 6, Alberta 6, British Columbia 6. Total 96.

**House of Commons.**—The representation of the people in the House of Commons has been governed by Acts of the Dominion Parliament passed in 1903, 1904, and 1907 (3 Edw. VII, c. 60; 4 Edw. VII, c. 35; 6-7 Edw. VII, c. 41). The provinces of Saskatchewan and Alberta were created by Acts of the Dominion Parliament passed in 1905 (4-5 Edw. VII, cc. 3 and 42), and after the Northwest Census of 1906 the Representation Act was amended by an Act of April 27, 1907 (7 Edw. VII, c. 41), which gave Saskatchewan ten members and Alberta seven members after the next ensuing election of October 26, 1908. The seven additional members thus given to Saskatchewan and Alberta brought the representation of Canada in the House of Commons up to 221. The Representation Act, 1914 (4-5 Geo. V., c. 51), which was assented to on June 12, 1914, came into operation for the election of the 13th Parliament of Canada. An amending Act (5 Geo. V., c. 19), and the Imperial Act (5-6 Geo. V., c. 45), provide that the House of Commons shall consist of 235 members, distributed by provinces as follows: Prince Edward Island 4, Nova Scotia 16, New Brunswick 11, Quebec 65, Ontario 82, Manitoba 15, Saskatchewan 16, Alberta 12, British Columbia 13 and Yukon Territory 1. Table 1 shows the representation in the House of Commons according to the districts of the Representation Act, 1914, and of the amending Act (5 Geo. V., c. 19).

**1.—Representation in the House of Commons according to the Districts of the Representation Act, 1914.**

Provinces and Districts.	Population, 1921.	Representation.	Provinces and Districts.	Population, 1921.	Representation.
<b>Canada.</b>	<b>8,788,483<sup>1</sup></b>	<b>235</b>	<b>New Brunswick.</b>	<b>387,876</b>	<b>11</b>
<b>Prince Edward Island.</b>	<b>88,615</b>	<b>4</b>	Charlotte.....	21,435	1
Kings.....	20,445	1	Gloucester.....	38,684	1
Prince.....	31,520	1	Kent.....	23,916	1
Queens.....	36,650	2	Northumberland.....	33,985	1
<b>Nova Scotia.</b>	<b>523,837</b>	<b>16</b>	Restigouche and Madawaska...	42,977	1
Antigonish and Guysborough....	27,098	1	Royal.....	32,078	1
Cape Breton North and Victoria	31,325	1	St. John City and County and		
Cape Breton South and Richmond.....	76,362	2	Albert County.....	69,093	2
Colchester.....	25,196	1	Victoria and Carleton.....	33,900	1
Cumberland.....	41,191	1	Westmorland.....	53,387	1
Digby and Annapolis.....	28,965	1	York-Sunbury.....	38,421	1
Halifax City and County.....	97,228	2	<b>Quebec.<sup>2</sup></b>	<b>2,361,199</b>	<b>65</b>
Hants.....	19,739	1	Argenteuil.....	17,165	1
Inverness.....	23,308	1	Bagot.....	18,035	1
Kings.....	23,723	1	Beauce.....	53,841	1
Lunenburg.....	33,742	1	Beauharnois.....	19,888	1
Pictou.....	40,851	1	Bellechasse.....	21,190	1
Shelburne and Queens.....	23,435	1	Berthier.....	19,817	1
Yarmouth and Clare.....	31,174	1	Bonaventure.....	29,092	1
			Brome.....	13,471	1
			Chambly and Verchères.....	34,643	1

<sup>1</sup> Including 7,988, the population of the Northwest Territories, and 485 belonging to the Canadian Navy.

<sup>2</sup> Includes portion of Northwest Territories added to Quebec by the Extension of Boundaries Act, 1912.

1.—Representation in the House of Commons according to the Districts of the Representation Act, 1914—con.

Provinces and Districts.	Population, 1921.	Representa- tion.	Provinces and Districts.	Population, 1921.	Representa- tion.
<b>Quebec—concluded.</b>			<b>Ontario—concluded.</b>		
Champlain.....	48,009	1	Elgin W.....	27,678	1
Charlevoix-Montmorency.....	28,874	1	Essex N.....	71,150	1
Châteauguay-Huntingdon.....	26,731	1	Essex S.....	31,425	1
Chicoutimi-Saguenay.....	90,609	1	Fort William and Rainy River.....	39,661	1
Compton.....	32,285	1	Frontenac.....	20,390	1
Dorchester.....	28,954	1	Glengarry and Stormont.....	38,573	1
Drummond and Arthabaska.....	44,823	1	Grenville.....	16,644	1
Gaspé.....	40,375	1	Grey N.....	30,667	1
Hull.....	43,541	1	Grey S.....	28,384	1
Joliette.....	25,913	1	Haldimand.....	21,237	1
Kamouraska.....	22,014	1	Halton.....	24,899	1
Labelle.....	35,927	1	Hamilton E.....	49,820	1
Laprairie-Napierville.....	20,065	1	Hamilton W.....	39,298	1
L'Assomption-Montcalm.....	28,318	1	Hastings E.....	23,072	1
Laval-Two Mountains.....	28,314	1	Hastings W.....	34,451	1
Levis.....	33,323	1	Huron N.....	23,540	1
L'Islet.....	17,859	1	Huron S.....	23,548	1
Lotbinière.....	21,837	1	Kent.....	52,139	1
Maskinongé.....	16,945	1	Kingston.....	24,104	1
Matane.....	36,303	1	Lambton E.....	25,801	1
Megantic.....	33,633	1	Lambton W.....	32,838	1
Missisquoi.....	17,709	1	Lanark.....	32,993	1
Montmagny.....	21,997	1	Leeds.....	34,909	1
Montreal Island—			Lennox and Addington.....	18,994	1
Hochelaga.....	73,526	1	Lincoln.....	48,625	1
Jacques Cartier.....	89,297	1	London.....	53,538	1
Laurier-Outremont.....	72,047	1	Middlesex E.....	27,994	1
Maisonneuve.....	64,933	1	Middlesex W.....	25,033	1
St. Anne.....	52,049	1	Muskoka.....	19,439	1
St. Denis.....	78,920	1	Nipissing.....	58,565	1
Westmount-St. Henri.....	62,909	1	Norfolk.....	26,366	1
St. James.....	42,443	1	Northumberland.....	30,512	1
St. Antoine.....	32,394	1	Ontario N.....	15,420	1
St. Lawrence-St. George.....	36,912	1	Ontario S.....	31,074	1
George-Etienne Cartier.....	54,800	1	Ottawa.....	93,740	2
St. Mary.....	63,975	1	Oxford N.....	24,527	1
Nicolet.....	29,695	1	Oxford S.....	22,235	1
Pontiac.....	46,201	1	Parry Sound.....	27,022	1
Portneuf.....	34,452	1	Peel.....	23,896	1
Quebec County.....	31,130	1	Perth N.....	32,461	1
Quebec E.....	38,330	1	Perth S.....	18,382	1
Quebec S.....	27,706	1	Peterborough E.....	13,716	1
Quebec W.....	37,993	1	Peterborough W.....	29,318	1
Richelieu.....	18,764	1	Port Arthur and Kenora.....	43,300	1
Richmond and Wolfe.....	42,248	1	Prescott.....	26,478	1
Rimouski.....	27,520	1	Prince Edward.....	16,806	1
St. Hyacinthe-Rouville.....	36,754	1	Renfrew N.....	23,956	1
St. John and Iberville.....	23,518	1	Renfrew S.....	27,061	1
Shefford.....	25,644	1	Russell.....	43,413	1
Sherbrooke.....	30,786	1	Simcoe E.....	37,122	1
Stanstead.....	23,380	1	Simcoe N.....	22,100	1
Témiscouata.....	44,310	1	Simcoe S.....	24,810	1
Terrebonne.....	33,908	1	Timiskaming.....	51,568	1
Three Rivers and St. Maurice.....	50,845	1	Toronto South.....	37,596	1
Vaudreuil-Soulanges.....	21,620	1	Toronto East.....	64,825	1
Wright.....	21,850	1	Toronto Centre.....	51,768	1
Yamaska.....	18,840	1	Toronto West.....	68,397	1
<b>Ontario.<sup>1</sup></b>	<b>2,933,662</b>	<b>82</b>	Toronto (Parkdale).....	80,780	1
Algoma E.....	40,618	1	Toronto North.....	72,478	1
Algoma W.....	33,676	1	Victoria.....	33,995	1
Brant.....	20,085	1	Waterloo N.....	41,698	1
Brantford City.....	33,292	1	Waterloo S.....	33,568	1
Bruce N.....	20,872	1	Welland.....	66,668	1
Bruce S.....	23,413	1	Wellington N.....	19,833	1
Carleton.....	32,673	1	Wellington S.....	34,327	1
Dufferin.....	15,415	1	Wentworth.....	64,449	1
Dundas.....	24,388	1	York E.....	77,950	1
Durham.....	24,629	1	York W.....	70,681	1
Elgin E.....	17,306	1	York S.....	100,054	1
			York N.....	23,136	1

<sup>1</sup> Includes portion of Northwest Territories added to Ontario by the Extension of Boundaries Act, 1912.



**1.—Representation in the House of Commons according to the Districts of the Representation Act, 1914—concluded.**

Provinces and Districts.	Popu- lation, 1921.	Repre- sentation.	Provinces and Districts.	Popu- lation, 1921.	Repre- sentation.
<b>Manitoba.<sup>1</sup></b>	<b>610,118</b>	<b>15</b>	<b>Alberta.</b>	<b>588,454</b>	<b>12</b>
Brandon.....	40,183	1	Battle River.....	49,173	1
Dauphin.....	35,482	1	Bow River.....	55,356	1
Lisgar.....	29,921	1	Calgary E.....	44,995	1
Macdonald.....	23,824	1	Calgary W.....	44,341	1
Marquette.....	41,254	1	Edmonton E.....	56,548	1
Nelson.....	19,806	1	Edmonton W.....	74,267	1
Neepawa.....	28,356	1	Lethbridge.....	37,699	1
Portage la Prairie.....	22,254	1	Macleod.....	34,008	1
Provencher.....	29,308	1	Medicine Hat.....	43,179	1
Selkirk.....	55,395	1	Red Deer.....	49,629	1
Souris.....	26,410	1	Strathcona.....	42,520	1
Springfield.....	58,870	1	Victoria.....	56,739	1
Winnipeg Centre.....	76,470	1			
Winnipeg North.....	62,957	1			
Winnipeg South.....	59,628	1			
<b>Saskatchewan.</b>	<b>757,510</b>	<b>16</b>	<b>British Columbia.</b>	<b>524,582</b>	<b>13</b>
Assiniboia.....	34,789	1	Burrard.....	69,922	1
Battleford.....	33,641	1	Cariboo.....	39,834	1
Battleford North.....	47,381	1	Comox-Alberni.....	32,009	1
Humboldt.....	55,225	1	Fraser Valley.....	28,811	1
Kindersley.....	44,772	1	Kootenay E.....	19,137	1
Last Mountain.....	50,055	1	Kootenay W.....	30,502	1
Maple Creek.....	56,064	1	Nanaimo.....	48,010	1
McKenzie.....	55,629	1	Skeena.....	28,934	1
Moosejaw.....	50,403	1	Vancouver Centre.....	60,879	1
Prince Albert.....	56,829	1	Vancouver South.....	46,137	1
Qu'Appelle.....	34,836	1	Victoria City.....	38,727	1
Régina.....	49,977	1	Westminster, New.....	45,982	1
Saskatoon.....	55,151	1	Yale.....	35,698	1
Swift Current.....	43,795	1			
Weyburn.....	53,275	1			
	35,688	1	<b>Yukon Territory.</b>	<b>4,157</b>	<b>1</b>

<sup>1</sup> Includes portion of Northwest Territories added to Manitoba by the Extension of Boundaries Act, 1912.

**2.—Governors General of Canada, 1867-1922.**

Name.	Date of appointment.	Date of assumption of office.
Viscount Monck, G.C.M.G.....	June 1, 1867	July 1, 1867
Lord Lisgar, G.C.M.G., (Sir John Young).....	Dec. 29, 1868	Feb. 2, 1869
The Earl of Dufferin, K.P., K.C.B., G.C.M.G.....	May 22, 1872	June 25, 1872
The Marquis of Lorne, K.T., G.C.M.G.....	Oct. 5, 1878	Nov. 25, 1878
The Marquis of Lansdowne, G.C.M.G.....	Aug. 18, 1883	Oct. 23, 1883
Lord Stanley of Preston, G.C.B.....	May 1, 1888	June 11, 1888
The Earl of Aberdeen, K.T., G.C.M.G.....	May 22, 1893	Sept. 18, 1893
The Earl of Minto, G.C.M.G.....	July 30, 1898	Nov. 12, 1898
The Earl Grey, G.C.M.G.....	Sept. 26, 1904	Dec. 10, 1904
Field-Marshal H.R.H. the Duke of Connaught, K.G.....	Mar. 21, 1911	Oct. 13, 1911
The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O.....	Aug. 19, 1916	Nov. 11, 1916
General the Lord Byng of Vimy, G.C.B., G.C.M.G., M.V.O.....	Aug. 2, 1921	Aug. 11, 1921

## 3.—Dominion Parliaments, 1867-1922.

Number of Parliament.	Ses-sion.	Date of Opening.	Date of Prorogation.	Days of ses-sion.	Elections, writs returnable, dissolutions, and lengths of Parliaments.
1st Parliament.....	1st	Nov. 1, 1867	May 22, 1868	118 <sup>1</sup>	Aug., Sept., 1867 <sup>2</sup>
	2nd	April 15, 1869	June 22, 1869	69	Sept. 24, 1867 <sup>4</sup>
	3rd	Feb. 15, 1870	May 12, 1870	87	July 8, 1872. <sup>5</sup>
	4th	Feb. 15, 1871	April 14, 1871	59	4 y., 9 m., 15 d. <sup>6</sup>
	5th	April 11, 1872	June 14, 1872	65	July, Aug., Sept., '72. <sup>3</sup>
2nd Parliament.....	1st	Mar. 5, 1873	Aug. 13, 1873	81 <sup>2</sup>	Sept. 3, 1872. <sup>4</sup>
	2nd	Oct. 23, 1873	Nov. 7, 1873	16	Jan. 2, 1874. <sup>5</sup>
3rd Parliament.....	1st	Mar. 26, 1874	May 26, 1874	62	1 y., 4 m., 0 d. <sup>6</sup>
	2nd	Feb. 4, 1875	April 8, 1875	64	Jan. 22, 1874. <sup>3</sup>
	3rd	Feb. 10, 1876	April 12, 1876	63	Feb. 21, 1874. <sup>4</sup>
	4th	Feb. 8, 1877	April 28, 1877	80	Aug. 17, 1873. <sup>5</sup>
	5th	Feb. 7, 1878	May 10, 1878	93	4 y., 5 m., 25 d. <sup>6</sup>
4th Parliament.....	1st	Feb. 13, 1879	May 15, 1879	92	Sept. 17, 1878. <sup>3</sup>
	2nd	Feb. 12, 1880	May 7, 1880	86	Nov. 21, 1878. <sup>4</sup>
	3rd	Dec. 9, 1880	Mar. 21, 1881	103	May 18, 1882. <sup>5</sup>
5th Parliament.....	4th	Feb. 9, 1882	May 17, 1882	98	3 y., 5 m., 28 d. <sup>6</sup>
	1st	Feb. 8, 1883	May 25, 1883	107	June 20, 1882. <sup>3</sup>
	2nd	Jan. 17, 1884	April 19, 1884	94	Aug. 7, 1882. <sup>4</sup>
6th Parliament.....	3rd	Jan. 29, 1885	July 20, 1885	173	Jan. 15, 1887. <sup>5</sup>
	4th	Feb. 25, 1886	June 2, 1886	98	4 y., 5 m., 10 d. <sup>6</sup>
	1st	April 13, 1887	June 23, 1887	72	Feb. 22, 1887. <sup>3</sup>
7th Parliament.....	2nd	Feb. 23, 1888	May 22, 1888	90	April 7, 1887. <sup>4</sup>
	3rd	Jan. 31, 1889	May 2, 1889	92	Feb. 3, 1891. <sup>5</sup>
	4th	Jan. 16, 1890	May 16, 1890	121	3 y., 9 m., 27 d. <sup>6</sup>
8th Parliament.....	1st	April 29, 1891	Sept. 30, 1891	155	March 5, 1891. <sup>3</sup>
	2nd	Feb. 25, 1892	July 9, 1892	136	April 25, 1891. <sup>4</sup>
	3rd	Jan. 26, 1893	April 1, 1893	66	April 24, 1896. <sup>5</sup>
	4th	Mar. 15, 1894	July 23, 1894	131	5 y., 0 m., 0 d. <sup>6</sup>
	5th	April 18, 1895	July 22, 1895	96	June 23, 1896. <sup>3</sup>
9th Parliament.....	6th	Jan. 2, 1896	April 23, 1896	111	July 13, 1896. <sup>4</sup>
	1st	Aug. 19, 1896	Oct. 5, 1896	43	Oct. 9, 1900. <sup>5</sup>
	2nd	Mar. 25, 1897	June 29, 1897	97	4 y., 2 m., 26 d. <sup>6</sup>
	3rd	Feb. 3, 1898	June 13, 1898	131	Nov. 7, 1900. <sup>3</sup>
	4th	Mar. 16, 1899	Aug. 11, 1899	149	Dec. 5, 1900. <sup>4</sup>
10th Parliament.....	5th	Feb. 1, 1900	July 13, 1900	163	Sept. 29, 1904. <sup>5</sup>
	1st	Feb. 6, 1901	May 23, 1901	107	3 y., 9 m., 26 d. <sup>6</sup>
	2nd	Feb. 13, 1902	May 15, 1902	90	Nov. 3, 1904. <sup>3</sup>
	3rd	Mar. 12, 1903	Oct. 24, 1903	227	Dec. 15, 1904. <sup>4</sup>
	4th	Mar. 10, 1904	Aug. 10, 1904	154	Sept. 17, 1908. <sup>5</sup>
11th Parliament.....	1st	Jan. 11, 1905	July 20, 1905	191	3 y., 9 m., 4 d. <sup>6</sup>
	2nd	Mar. 8, 1906	July 13, 1906	128	Oct. 26, 1908. <sup>3</sup>
	3rd	Nov. 22, 1906	April 27, 1907	157	Dec. 3, 1908. <sup>4</sup>
	4th	Nov. 28, 1907	July 20, 1908	236	July 29, 1911. <sup>5</sup>
12th Parliament.....	1st	Jan. 20, 1909	May 19, 1909	120	2 y., 7 m., 28 d. <sup>6</sup>
	2nd	Nov. 11, 1909	May 4, 1910	175	Oct. 26, 1908. <sup>3</sup>
	3rd	Nov. 17, 1910	July 29, 1911	196 <sup>7</sup>	Dec. 3, 1908. <sup>4</sup>
	1st	Nov. 15, 1911	April 1, 1912	139	July 29, 1911. <sup>5</sup>
13th Parliament.....	2nd	Nov. 21, 1912	June 6, 1913	173 <sup>8</sup>	2 y., 7 m., 28 d. <sup>6</sup>
	3rd	Jan. 15, 1914	June 12, 1914	148	Sept. 21, 1911. <sup>3</sup>
	4th	Aug. 18, 1914	Aug. 22, 1914	5	Oct. 7, 1911. <sup>4</sup>
	5th	Feb. 4, 1915	April 15, 1915	71	Oct. 6, 1917. <sup>5</sup>
	6th	Jan. 12, 1916	May 18, 1916	127	6 y., 0 m. 0 d. <sup>6</sup>
14th Parliament.....	7th	Jan. 18, 1917	Sept. 20, 1917	207 <sup>9</sup>	
	1st	Mar. 13, 1913	May 24, 1918	68	Dec. 17, 1917. <sup>3</sup>
	2nd	Feb. 20, 1919	July 7, 1919	138	Feb. 27, 1918. <sup>4</sup>
	3rd	Sept. 1, 1919	Nov. 10, 1919	71	Oct. 4, 1921. <sup>5</sup>
	4th	Feb. 26, 1920	July 1, 1920	127	3 y., 7 m., 6 d. <sup>6</sup>
15th Parliament.....	5th	Feb. 14, 1921	June 4, 1921	111	Dec. 6, 1921 <sup>3</sup>
	1st.	Mar. 8, 1922	June 28, 1922	113	Jan. 14, 1922. <sup>4</sup>

<sup>1</sup> Adjourned from 21st December, 1867, to 12th March, 1868, to allow the Local Legislatures to meet.  
<sup>2</sup> Adjourned 23rd May till 13th August. <sup>3</sup> Period of general elections. <sup>4</sup> Writs returnable. <sup>5</sup> Dissolution of Parliament. <sup>6</sup> Duration of Parliament in years, months and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. <sup>7</sup> Not including days (59) of adjournment from May 19th to July 18th. <sup>8</sup> Not including days (25) of adjournment from Dec. 19th, 1912, to Jan. 14th, 1913. <sup>9</sup> Not including days (39) of adjournment from Feb. 7th to April 18th, 1917.

## 4.—Ministries since Confederation.

1. Rt. Hon. Sir John A. Macdonald, Premier. From July 1, 1867 to Nov. 6, 1873.
2. Hon. Alexander Mackenzie, Premier. From Nov. 7, 1873 to Oct. 16, 1878.
3. Rt. Hon. Sir John A. Macdonald, Premier. From Oct. 17, 1878 to June 6, 1891.
4. Hon. Sir John J. Abbott, Premier. From June 16, 1891 to Dec. 5, 1892.
5. Hon. Sir John S. D. Thompson, Premier. From Dec. 5, 1892, to Dec. 12, 1894.
6. Hon. Sir Mackenzie Bowell, Premier. From Dec. 21, 1894, to April 27, 1896.
7. Hon. Sir Charles Tupper, Bart., Premier. From May 1, 1896, to July 8, 1896.
8. Rt. Hon. Sir Wilfred Laurier, Premier. From July 11, 1896 to Oct. 6, 1911.
9. Rt. Hon. Sir Robert L. Borden, Premier. (Conservative Administration). From Oct. 10, 1911, to Oct. 12, 1917.
10. Rt. Hon. Sir Robert L. Borden, Premier. (Unionist Administration). From Oct. 12, 1917 to July, 10 1920.
11. Rt. Hon. Arthur Meighen, Premier. (Unionist—"National Liberal and Conservative Party"). From July 10, 1920, to Dec. 29, 1921.
12. Rt. Hon. William Lyon Mackenzie King, Premier. (Liberal). From Dec. 29, 1921.

NOTE.—A complete list of the members of Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1912, pp. 422-429. A list of the members of the Dominion Ministries from 1911 to 1921 appeared in the Year Book of 1920, pp. 651-653.

## TWELFTH DOMINION MINISTRY.

(According to precedence of the Ministers as at the formation of the Cabinet.)

Office.	Occupant.	Date of Appointment.
TWELFTH MINISTRY.		
Prime Minister, Secretary of State for External Affairs, President of the Privy Council.....	Right Hon. William Lyon Mackenzie King	Dec. 29, 1921
Minister of Finance.....	Hon. William S. Fielding.....	Dec. 29, 1921
Minister of Militia and Defence and Minister of Naval Service.....	Hon. George P. Graham.....	Dec. 29, 1921
Postmaster General.....	Hon. Charles Murphy.....	Dec. 29, 1921
Minister without Portfolio.....	Hon. Raoul Dandurand.....	Dec. 29, 1921
Minister of Soldiers' Civil Re-Establishment and the Minister in charge of and to administer the Department of Health....	Hon. Henri S. Béland.....	Dec. 29, 1921
Minister of Public Works.....	Hon. Hewitt Bostock..... Hon. James H. King.....	Dec. 29, 1921 Feb. 3, 1922
Minister of Justice and Attorney General...	Hon. Sir Lomer Gouin.....	Dec. 29, 1921
Minister of Customs and Excise.....	Hon. Jacques Bureau.....	Dec. 29, 1921
Minister of Marine and Fisheries.....	Hon. Ernest Lapointe.....	Dec. 29, 1921
Solicitor General.....	Hon. Daniel D. McKenzie.....	Dec. 29, 1921
Minister of Trade and Commerce.....	Hon. James A. Robb.....	Dec. 29, 1921
Minister without Portfolio.....	Hon. Thomas A. Low.....	Dec. 29, 1921
Secretary of State.....	Hon. Arthur B. Copp.....	Dec. 29, 1921
Minister of Railways and Canals.....	Hon. William C. Kennedy.....	Dec. 29, 1921
Minister of the Interior, Superintendent General of Indian Affairs and Minister of Mines.....	Hon. Charles Stewart.....	Dec. 29, 1921
Minister of Agriculture.....	Hon. William R. Motherwell.....	Dec. 29, 1921
Minister of Labour.....	Hon. James Murdock.....	Dec. 29, 1921
Minister without Portfolio.....	Hon. John E. Sinclair.....	Dec. 29, 1921

## 5.—Lieutenant-Governors of Provinces, 1867-1922.

## PRINCE EDWARD ISLAND.

Name.	Date of appointment.	Name.	Date of appointment.
W. C. F. Robinson.....	June 10, 1873	P. A. MacIntyre.....	May 13, 1899
Sir Robert Hodgson.....	Nov. 22, 1873	D. A. McKinnon.....	Oct. 3, 1904
Sir Thomas H. Haviland.....	July 14, 1879	Benjamin Rogers.....	June 1, 1910
Andrew Archibald Macdonald.....	Aug. 1, 1884	A. C. Macdonald.....	June 2, 1915
Jedediah S. Carvell.....	Sept. 21, 1889	Murdoek McKinnon.....	Sept. 3, 1919
Geo. W. Howlan.....	Feb. 21, 1894		

## NOVA SCOTIA.

Lieut.-Gen. Sir W. F. Williams.....	July 1, 1867	Malachy Bowes Daly.....	July 11, 1890
Major-Gen. Sir C. Hastings Doyle.....	Oct. 18, 1867	Malachy Bowes Daly.....	July 29, 1895
Lieut.-Gen. Sir C. Hastings Doyle.....	Jan. 31, 1868	Alfred G. Jones.....	Aug. 7, 1900
Sir E. Kenny (acting).....	May 31, 1870	Duncan C. Fraser.....	Mar. 27, 1906
Joseph Howe.....	May 1, 1873	James D. McGregor.....	Oct. 18, 1910
A. G. Archibald.....	July 4, 1873	David MacKeen.....	Oct. 19, 1915
Matthew Henry Richey.....	July 4, 1883	McCallum Grant.....	Nov. 29, 1916
A. W. McLelan.....	July 9, 1888	McCallum Grant.....	Mar. 21, 1922

## NEW BRUNSWICK.

Major-Gen. Sir C. Hastings Doyle.....	July 1, 1867	John A. Fraser.....	Dec. 20, 1893
Col. F. P. Harding.....	Oct. 18, 1867	A. R. McClelan.....	Dec. 9, 1896
L. A. Wilmot.....	July 14, 1868	Jabez B. Snowball.....	Feb. 5, 1902
Samuel Leonard Tilley.....	Nov. 5, 1873	L. J. Tweedie.....	Mar. 2, 1907
E. Baron Chandler.....	July 16, 1878	Josiah Wood.....	Mar. 6, 1912
Robert Duncan Wilmot.....	Feb. 11, 1880	G. W. Ganong.....	June 29, 1916
Sir Samuel Leonard Tilley.....	Oct. 31, 1885	William Pugsley.....	Nov. 6, 1917
John Boyd.....	Sept. 21, 1893		

## QUEBEC.

Sir N. F. Belleau.....	July 1, 1867	Sir J. A. Chapleau.....	Dec. 5, 1892
Sir N. F. Belleau.....	Jan. 31, 1868	L. A. Jetté.....	Feb. 2, 1898
Réné Edouard Caron.....	Feb. 11, 1873	J. A. Jetté.....	Feb. 2, 1903
Luc Letellier de St. Just.....	Dec. 15, 1876	Sir Charles A. P. Pelletier.....	Sept. 4, 1908
Theodore Robitaille.....	July 26, 1879	Sir François Langelier.....	May 5, 1911
L. F. R. Masson.....	Nov. 7, 1884	Sir Pierre E. Leblanc.....	Feb. 9, 1915
A. R. Angers.....	Oct. 24, 1887	Right Hon. Sir Charles Fitzpatrick.....	Oct. 21, 1918

## ONTARIO.

Major-Gen. H. W. Stisted.....	July 1, 1867	Sir Oliver Mowat.....	Nov. 18, 1897
W. P. Howland.....	July 14, 1868	Sir William Mortimer Clark.....	April 20, 1903
John W. Crawford.....	Nov. 5, 1873	Sir John M. Gibson.....	Sept. 22, 1908
D. A. Macdonald.....	May 18, 1875	Lt.-Col. Sir John S. Hendrie.....	Sept. 26, 1914
John Beverly Robinson.....	June 30, 1880	Lionel H. Clark.....	Nov. 27, 1919
Sir Alexander Campbell.....	Feb. 8, 1887	Henry Cockshutt.....	Sept. 10, 1921
George A. Kirkpatrick.....	May 30, 1892		

## MANITOBA.

A. G. Archibald.....	May 20, 1870	J. C. Patterson.....	Sept. 2, 1895
Francis Goodschall Johnson.....	April 9, 1872	Sir D. H. McMillan.....	Oct. 16, 1900
Alexander Morris.....	Dec. 2, 1872	Sir D. H. McMillan.....	May 11, 1906
Joseph Ed. Cauchon.....	Dec. 2, 1877	D. C. Cameron.....	Aug. 1, 1911
James C. Atkins.....	Sept. 22, 1882	Sir James A. M. Aikins.....	Aug. 3, 1916
J. C. Shultz.....	July 1, 1888	Sir James A. M. Aikins.....	Aug. 7, 1921

1Second Term.



## 5.—Lieutenant-Governors of Provinces, 1867-1922—concluded.

## SASKATCHEWAN.

Name.	Date of appointment.	Name.	Date of appointment.
A. E. Forget.....	Sept. 1, 1905	Sir Richard Stuart Lake.....	Oct. 6, 1915
Geo. W. Brown.....	Oct. 5, 1910	H. W. Newlands.....	Feb. 17, 1921

## ALBERTA.

George H. V. Bulyea.....	Sept. 1, 1905	Robert George Brett.....	Oct. 6, 1915
George H. V. Bulyea.....	<sup>1</sup> Oct. 5, 1910	Robert George Brett.....	<sup>1</sup> Oct. 20, 1920

## BRITISH COLUMBIA.

J. W. Trutch.....	June 5, 1871	Sir Henri G. Joly de Lotbinière..	June 21, 1900
Albert Norton Richards.....	June 27, 1876	James Dunsmuir.....	May 11, 1906
Clement F. Cornwall.....	June 21, 1881	T. W. Patterson.....	Dec. 3, 1909
Hugh Nelson.....	Feb. 7, 1887	Sir Frank S. Barnard.....	Dec. 5, 1914
Edgar Dewdney.....	Nov. 1, 1892	Col. Edward G. Prior.....	Dec. 9, 1919
Thomas R. McInnes.....	Nov. 18, 1897	Walter C. Nichol.....	Dec. 24, 1920

## THE TERRITORIES.

A. G. Archibald.....	May 10, 1870	Joseph Royal.....	July 1, 1888
Francis Goodsell Johnson.....	April 9, 1872	C. H. Mackintosh.....	Oct. 31, 1893
Alexander Morris.....	Dec. 2, 1872	M. C. Cameron.....	May 30, 1898
David Laird, P.C.....	Oct. 7, 1876	A. E. Forget.....	Oct. 11, 1898
Edgar Dewdney.....	Dec. 3, 1881	A. E. Forget.....	<sup>1</sup> Mar. 30, 1904

<sup>1</sup>Second term.HONORARY ADVISORY COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH.<sup>1</sup>

The Honorary Advisory Council for Scientific and Industrial Research, generally known as the Research Council, was constituted on November 29, 1916, under a Sub-Committee of the Privy Council, formed on June 1 of the same year, to have charge of all measures to foster the scientific development of the industries of Canada. This Sub-Committee consists of the Minister of Trade and Commerce (Chairman), and the Ministers of the Interior, Agriculture, Mines, Customs and Excise and Labour.

The Research Council, the formation of which was given statutory authority by the Research Council Act of 1917 (7-8 Geo. V., c. 20), consists of eleven representatives of the scientific, technical and industrial interests of Canada, one of these being a permanent officer, the Administrative Chairman of the Council. The Council has charge of all matters affecting scientific and industrial research in Canada which are assigned to it by the Sub-Committee and advises the Sub-Committee on questions of scientific and technological methods affecting the expansion of Canadian industries or the utilization of the natural resources of Canada.

<sup>1</sup>A detailed account of the organization of the Research Council was given on pages 619-623 of the 1916-17 Year Book; summaries of its activities appeared on pages 581-584 of the 1918 Year Book and on pages 584-587 of the 1919 Year Book. The 1920 Year Book contained on pages 53-57 an outline of its organization and activities since its commencement.

The Council meets at least four times a year in Ottawa, and in order to economize its time, has appointed from its membership a number of standing and special committees to deal with particular problems; further, in order to have expert advice along technical lines, it has appointed twelve associate and advising committees of Canadian scientists, technologists and business men, whose advice on their specialties is available without remuneration as required. Nor do the members of the Research Council receive for their services any other remuneration than their expenses.

Research is impossible without trained "researchers." Consequently, to increase the number of scientific investigators in Canadian industries, the Council has established Fellowships, Studentships and Bursaries, having an annual value of \$2,200, \$1,000 and \$750 respectively, which may be awarded to graduates of universities and technical colleges who have given evidence of the possession of the special knowledge and capacity required to conduct independent research in some department of science bearing on industrial processes. During the fiscal year 1921-22, seven Fellowships, fourteen Studentships and thirty-five Bursaries were awarded.

During the year 1921-22 many applications for financial assistance in aid of special researches were received, which were carefully examined and a number approved and the assistance granted. Among these may be mentioned a grant to Professor Wilfred Sadler to complete an investigation for determining the character of the bacteria and other germs found in cream, milk and butter. The studies made reveal much on the bacterial flora of graded butter, suggest the importance of water supply as a possible agency of contamination, emphasize the possibility of bacterial recontamination subsequent to pasteurization, indicate the necessity for bacterial control in the management of cream and the manufacture of butter, and define cases where specific deterioration of grade has been eliminated or rendered less acute by putting into practice the advice tendered as a result of the laboratory findings.

To ascertain the possibility of cultivating economically in British Columbia several essential oil and drug-yielding plants, a grant was made to Professors R. H. Clark and J. Davidson of the University of British Columbia. The investigations made indicate that the results of storing the bark of *Cascara Sagrada* for three years previous to use can be produced quickly by chemical means, and tests made at the Vancouver General Hospital with bark so treated have been satisfactory. The *Cascara Sagrada* wood was next examined to see if it contained enough active constituent to pay for extraction. Preliminary results in this connection indicate that the wood is practically as active as the bark. This result, if fully confirmed, will mean the conservation of the fast disappearing *cascara* tree.

A grant was made to Professor J. C. McLennan, Director of the Physics Laboratory of the University of Toronto, to continue his investigations regarding the relations of the infra red rays to the structure of atoms. A special study has been made of the ionization

of the atoms of mercury. Information has been secured which is very useful in connection with the problem of determining the energy required to be expended in disrupting atoms and releasing atomic energy.

A grant to assist in a study of the gap in ether rays between ultra-violet light and X-rays was awarded to Professor A. L. Hughes of Queen's University. Radiation of wave length between that of the softest X-rays and that of the most extreme ultra-violet light undoubtedly exists, but hitherto has not been produced; it is the purpose of the investigation to explore this region. There are certain fundamental differences in the method of the production of light and X-rays, and it is important, therefore, to investigate whether or not these differences merge into each other in the unexplored region.

For the purpose of making a thorough study of the cause and treatment of acidity in the soils of Quebec and New Brunswick, a grant was made to Principal F. C. Harrison of Macdonald College. This condition, which is common in the soils of eastern North America, interferes seriously with the growth of alfalfa, red clover, and, probably, to some extent, with the majority of useful crops.

Professor H. E. T. Haultain of the University of Toronto received a grant to continue a research carried on during the past two years in an attempt to analyse the paths of balls in ore crushing tube mills by means of photography. Some 500 photographs were taken and a definite advance was made.

To investigate the causes of soil corrosion of iron piping and other iron structures in Canada, a grant was made to Professor John W. Shipley, University of Manitoba. This corrosion, which causes a very large annual loss in these provinces, is due to the action of soil waters, but the chemical reaction concerned must be ascertained before methods of treatment of the iron used in such structures can be found to prevent such corrosion. Professor Shipley has been engaged on this problem for more than a year and from the results he obtained, is confident that the causes of the corrosion can be definitely ascertained.

A few years ago the destructive effect of the alkali soil waters of the west on concrete was brought forcibly to the attention of the engineering profession, when structures of great importance and magnitude situated in the prairie provinces, were found to be disintegrating under this destructive agency. A brief survey showed that structures involving millions of dollars were endangered, and that the problem was so serious that certain engineers of standing had decided that until more was known of the action, concrete could not be safely used under conditions where alkali ground water would be encountered. In view of the importance of this problem, the Research Council awarded a considerable grant to a committee of the Engineering Institute of Canada under the chairmanship of Professor C. J. Mackenzie of the University of Saskatchewan, which was formed to investigate this problem. The investigation has been divided into two phases, (a) physical field tests and (b) chemical research.



It is not expected that any results will be available for publication for at least another year, as the field specimens have to be exposed to alkali conditions for that time before an examination is made.

The problem of utilizing the low grade iron ore deposits of Canada is one of the most vitally important questions with which the Dominion is faced. Very few large beds of high grade iron ore have been discovered in Canada, but on the other hand many large deposits of low grade iron ore are known, and a number are in localities comparatively easy of access. These ores, however, must be handled in such a way that they can compete with the high grade iron ores now imported from the United States, from which nearly all the iron which is now produced in Canada is smelted. A sub-committee of the Associate Committee of the Research Council on Mining and Metallurgy has been investigating this problem along two lines. (a) It has carefully studied all printed matter and reports on the deposits of iron ore in Canada, to ascertain whether any of these ore beds require additional study in the field and whether it is advisable to carry on prospecting in any particular portion of the Dominion for the purpose of discovering new ore beds. (b) The committee is arranging for experiments on a commercial scale with certain beneficiated ores now produced in Canada with a view to determining their availability for blast furnace use and also the cost of producing iron from them. They are also arranging to make certain large scale tests to try certain newly discovered methods of beneficiation, which seem specially applicable to certain classes of iron ore. These investigations are not yet sufficiently advanced to enable a definite statement to be made as to the results.

Many other investigations have been carried on under the auspices of the Research Council during 1921-1922.

#### *Proposed National Research Institute—*

The Research Council in 1917 recommended the establishment of a National Research Institute in Canada and a special committee of the House of Commons concurred in this recommendation, pointing out that similar institutions existed in Great Britain, Germany, the United States and Australia, while France, Italy, Japan and New Zealand were taking measures to organize research institutes. As a consequence a bill providing for the establishment of a National Research Institute was passed by the House of Commons in the spring of 1921, but was rejected by the Senate.

#### **PUBLIC LANDS.**

**Dominion Lands.**—The Crown Lands of the Dominion of Canada are situated (a) in the Prairie Provinces (Manitoba, Saskatchewan and Alberta), (b) in a belt of twenty miles on either side of the main line of the Canadian Pacific Railway, known as the Dominion Railway Belt of British Columbia, and (c) in a block in northern British Columbia, containing 3,500,000 acres, known as



the "Peace River Block." Every person who is the sole head of a family and every male who has attained the age of eighteen years and is a British subject, or declares intention to become a British subject, is entitled to apply for entry for a homestead. The lands are laid out in townships of 36 sections. Each section contains 640 acres and is divided into quarter-sections of 160 acres. A quarter section of 160 acres may be obtained as a homestead on payment of an entry fee of \$10 and fulfilment of certain conditions of residence and cultivation. To qualify for the issue of the patent a settler must have resided upon his homestead for at least six months in each of three years, must have erected a habitable house thereon, and must have at least 30 acres of his holding broken, of which 20 acres must be cropped. A reduction may be made in the area of breaking where the land is difficult to cultivate on account of scrub or stone. Provision is made for residence in the vicinity on certain conditions, in which case the area of cultivation must be increased.

**Disposal of Dominion Lands in Manitoba, Saskatchewan and Alberta.**—According to figures supplied by the Department of the Interior, a total of 123,628,182 acres, equal to 5,366 townships, or 193,169 square miles, has been alienated from the Crown. The total number of acres surveyed to 1st January, 1921, was 200,280,209, of which 25,649,800 were available for homestead entry. Table 6 shows the distribution of the surveyed area for each of the three Prairie Provinces as at January 1, 1921.

In addition to the surveyed area there are large tracts of land in the northern parts of these provinces which have as yet been explored only in a very partial way. The total area of this unsurveyed tract is 285,362,489 acres, of which 22,384,720 acres are water covered. Reports on the resources and developments of Manitoba, Saskatchewan and Alberta have been issued by the Natural Resources Intelligence Branch of the Department of the Interior, some of which are as follows: The New Mining District of Manitoba, The Peace River District of Alberta, Oil and Gas in Western Canada, A description of the resources and possibilities of the province of Saskatchewan, and statistical compilations on the Natural Resources of Manitoba, Saskatchewan and Alberta, Athabaska to the Bay. Similar reports have been issued with regard to other parts of Canada such as: Natural Resources of Nova Scotia, The Province of New Brunswick, and Central British Columbia. With the object of assisting in the settlement and development of the idle lands in Canada, this Branch also publishes lists of unoccupied lands in the Prairie and Maritime Provinces, giving a short description of the properties, the prices and terms and the owners' names and addresses, thus affording prospective purchasers an easy means of getting in touch with those who are not cultivating their lands and affording them an opportunity of selecting lands suitable to their means and requirements.

**6.—Distribution of the Surveyed Areas in Manitoba, Saskatchewan and Alberta, January 1, 1921.**

Description.	Manitoba.	Saskatchewan.	Alberta.	Total.
	acres.	acres.	acres.	acres.
Homesteads (including military homesteads).....	8,367,000	27,478,600	18,268,300	54,113,900
Pre-emption and Purchased Homesteads (1st Sept., 1903, to 20th Mar., 1913).....	-	5,518,200	2,664,300	8,182,500
Half-Breed Script, Sales, Special grants, etc.....	5,094,700	2,316,800	1,240,800	8,652,300
Granted to Railway Companies.....	3,566,997	15,177,063	13,120,014	31,864,074
Granted to Hudson's Bay Company.....	1,196,700	3,183,200	2,175,600	6,555,500
School Land Endowment (1-18 of area surveyed in sections).....	1,630,600	3,941,900	3,751,600	9,324,100
Sold under Irrigation System.....	-	76,832	980,850	1,057,682
Under Timber Licenses <sup>1</sup> .....	909,800	1,071,000	1,304,000	3,284,800
Under Grazing Leases <sup>1</sup> .....	140,600	3,021,600	2,908,200	6,070,400
Forest Reserves and Parks <sup>1</sup> .....	2,386,700	5,953,700	16,754,000	25,094,400
Reserved for Forestry Purposes (inside surveyed tract) <sup>1</sup> .....	746,300	1,430,000	1,677,500	3,853,800
Road Allowances <sup>1</sup> .....	974,700	1,467,400	1,285,900	3,728,000
Parish and River lots.....	505,211	84,010	118,564	707,785
Indian Reserves.....	433,860	1,070,949	1,367,974	2,872,783
Indian Reserves surrendered.....	87,560	410,297	302,228	800,085
Water-covered lands (inside surveyed tract) <sup>1</sup> .....	4,255,500	1,911,100	2,301,700	8,468,300
Now available for entry.....	5,275,900	4,912,900	15,461,900	25,649,800
<b>Total surveyed area.....</b>	<b>35,572,128</b>	<b>79,025,551</b>	<b>85,682,530</b>	<b>200,280,209</b>

<sup>1</sup>Area not available for cultivation.

**Railway Lands.**—Table 7 is a record for the three fiscal years 1919, 1920, 1921 of the sales of lands by the Hudson's Bay Company and by railway companies having government land grants. The total sales in the fiscal year 1921 (the year ended March 31, 1921), amounted to 553,630 acres at a price of \$10,860,756, as compared with 1,026,157 acres at a price of \$19,188,225 in the previous fiscal year. The 1921 prices average \$19.61 per acre, as against \$18.69 in the preceding year.

**7.—Land Sales by Railway Companies having Government Land Grants, and by the Hudson's Bay Company, in the Fiscal Years 1919-1921.**

Companies.	1919.		1920.		1921.	
	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.
Hudson's Bay Company.....	285,561	\$ 4,978,950	276,629	\$ 4,724,941	178,301	\$ 3,037,369
Canadian Pacific Railway.....	602,555	10,580,669	571,571	11,356,146	275,636	5,898,994
Manitoba Southwestern Colonization Railway.....	5,289	67,214	4,623	56,760	1,518	20,058
Qu'Appelle, Long Lake, and Saskatchewan Railway and Steamboat Co.....	33,838	527,670	32,095	474,895	11,432	160,472
Calgary and Edmonton Railway Company.....	31,774	479,496	26,953	425,656	11,681	191,928
Canadian Northern Ry. Co.....	65,110	1,261,963	86,305	1,685,241	69,934	1,455,319
Great Northwest Central Railway Company.....	14,530	252,774	27,981	464,586	5,128	96,616
<b>Total.....</b>	<b>1,038,657</b>	<b>18,148,736</b>	<b>1,026,157</b>	<b>19,188,225</b>	<b>553,630</b>	<b>10,860,756</b>

**Homestead Entries.**—In the calendar year 1921 the total number of ordinary homestead entries for lands of the Dominion Government was 7,346, as compared with 5,435 in 1920, 6,623 in 1919, 4,378 in 1918, 8,768 in 1917, 12,568 in 1916, 17,532 in 1915,

and 25,623 in 1914. In 1921, 1,477 entries were made in Manitoba, as against 795 in 1920, 1,209 in 1919, 873 in 1918, 1,618 in 1917, 2,616 in 1916, 4,113 in 1915 and 4,252 in 1914; 2,729 in Saskatchewan against 1,726 in 1920, 1,840 in 1919, 1,273 in 1918, 2,957 in 1917, 4,519 in 1916, 6,349 in 1915, and 9,752 in 1914; 2,936 in Alberta, against 2,794 in 1920, 3,464 in 1919, 2,163 in 1918, 3,982 in 1917, 5,169 in 1916, 6,584 in 1915 and 10,722 in 1914; and 204 in British Columbia against 120 in 1920, 110 in 1919, 69 in 1918, 211 in 1917, 264 in 1916, 486 in 1915 and 847 in 1914.

**Pre-emptions.**—The privilege of making pre-emptions or purchased homestead entries was withdrawn by Order in Council, from 20th March, 1918, confirmed by chapter 19 of the Statutes of 1918, assented to May 24, 1918.

**Provincial Public Lands.**—In the Maritime Provinces, in Quebec, Ontario, and British Columbia, the public lands are administered by the Provincial Governments. In Prince Edward Island all the land is settled.

*Nova Scotia.*—In *Nova Scotia* there are no free grants of land; but, under conditions prescribed by the Crown Lands Act of the Provincial Assembly (10 Edw. VII, 1910, c. 4, s. 26), and an amending Act of May 3, 1912, Crown lands, not exceeding in each case 150 acres, may be granted for agricultural or grazing purposes to applicants of not less than 18 years of age at the price of \$1 per acre in addition to the expenses of survey. Leases and grants of Crown lands may also be obtained upon conditions prescribed. The total area of the Crown lands in *Nova Scotia* is approximately 808,329 acres.

*New Brunswick.*—The area of *New Brunswick* is about 17,143,000 acres. Of this the Crown holds about 7,500,000 acres, most of which is timber land. The province is essentially a wooded country and will in all probability always derive a large part of its revenue from lumbering industries. Practically all of the Crown timber lands are held by license for the cutting of timber, most of these licenses expiring in the year 1933. While it may be safely said that the bulk of the Crown lands are better suited to lumbering than agriculture, yet there are still some Crown lands well suited to mixed farming which may be taken up by prospective settlers. One hundred acres is the maximum allowed to any one settler, and he is required to reside on his land and cultivate the same for three years before obtaining a grant of same. For some of the best lands \$1 per acre is asked from settlers in addition to the settlement duties already referred to. The Crown controls the right to hunt and fish within the Province. Hunting of migratory birds and fishing in tidal waters are, however, under the control of the Dominion Government. With the possible exception of *British Columbia* and

For copies of the detailed regulations governing the disposal of provincial Crown lands, application should be made as follows: *Nova Scotia*, to the Secretary for Industries and Immigration, Halifax; *New Brunswick*, to the Deputy Minister of Lands and Mines, Fredericton; *Quebec*, to the Deputy Minister of Lands and Forests, Quebec; *Ontario*, to the Minister of Lands and Forests, Parliament Buildings, Toronto; *British Columbia* to the Deputy Minister of Lands, Victoria.



the Yukon, New Brunswick is probably the best big game country in Canada, the Crown land in the interior being one vast forest well watered by rivers, streams and lakes.

*Quebec.*—In Quebec the area of public lands subdivided and unsold on June 30th, 1920, was 7,682,767 acres. During the year ended June 30th, 1921, 421,261 acres were surveyed; 100,301 acres reverted to the Crown; 178,626 acres were sold and granted, the receipts including arrears, being \$148,041. Adding to the acreage available at June 30th, 1920, the area surveyed and the areas that reverted, and deducting sales and grants, there remained subdivided and unsold on June 30th, 1921, 8,025,703 acres. Agricultural lands in 100-acre lots are available for settlement upon prescribed conditions at the price of 60 cents per acre.

*Ontario.*—In Ontario the public lands which are open for disposal are chiefly situated in the districts of Muskoka, Parry Sound, Nipissing, Sudbury, Algoma, Timiskaming, Thunder Bay, Kenora and Rainy River, and in the counties of Haliburton, Peterborough, Hastings, Frontenac, Lennox and Addington and Renfrew. In northern Ontario, which comprises the territory lying north and west of the Ottawa and French rivers, the townships open for sale are subdivided into lots of 320 acres, or sections of 640 acres, and a half lot or quarter section of 160 acres is allowed to each applicant at the price of 50 cents per acre, payable one-fourth cash and the balance in three annual instalments with interest at 6 p.c. The applicant must be male (or sole female) head of a family, or a single man over 18 years of age. The conditions of purchase include actual occupation by the purchaser, the erection of a house, the clearance and cultivation of at least 10 p.c. of the area and three years' residence. Proxy regulations enable an individual to purchase a half lot of 160 acres and place an agent in residence, but the duties to be performed before issue of patent are double those required in ordinary purchases.

Free grants are available on lands within the districts of Algoma, Nipissing, Thunder Bay, Sudbury, Rainy River and Kenora, and between the Ottawa river and the Georgian bay, comprising portions of the counties of Renfrew, Frontenac, Addington, Hastings, Peterborough and Haliburton and the districts of Muskoka and Parry Sound. Grants of 160 acres are made to either single or married men in free grant territories where the land is subdivided in sections of 320 acres. In the Huron and Ottawa territory an allowance for waste lands may increase the grant of a single man to an area not exceeding 200 acres, while heads of families may secure 200 acres free and purchase an additional 100 acres at 50 cents an acre. The settlement duties for free grants are as follows: (a) at least 15 acres to be cleared and brought under cultivation, of which 2 acres at least are to be cleared and cultivated annually; (b) a habitable house to be built at least 16 by 20 feet in size; (c) actual and continuous residence upon and cultivation of the land for 3 years after location and thence to the issue of the patent. The mines and minerals and all timber other than pine, are covered by the patent.



Returned soldiers who enlisted and rendered overseas' service with the Canadian Expeditionary Forces are each entitled to an allocation of 160 acres free, in any township regularly open for sale, subject nevertheless to the performance of settlement duties.

Ranching lands of prospective quality may be obtained on reasonable terms in waste and wooded areas, the valley of the Trent river, lying between lake Ontario and the Georgian bay, affording good opportunities for cattle and sheep raising. The maximum annual rental is 5 cents an acre, on easy stocking conditions. Leases may issue on condition that there be regularly maintained on the land such number of head of stock as may be consistent with the resources of the area covered.

Ontario includes 230,000,000 acres of land, of which only 14,500,000 acres are under cultivation. More than 20,000,000 acres of the very finest arable land await the plough. Ontario is  $3\frac{1}{2}$  times as large as the British Isles and  $1\frac{1}{2}$  times as large as Texas, and almost twice the size of France or Germany. From east to west its borders are 1,000 miles apart, and from north to south, 1,075 miles. Recent railway construction and colonization road building have made accessible vast tracts of untilled farm land and virgin forests in northern Ontario.

Loans are made to settlers in the northern and northwestern districts of Ontario. The maximum amount of any loan to be made to a settler is \$500, with interest at 6 p.c. per annum, upon such terms and conditions as the Loan Commissioner may approve. The Government of Ontario is anxious that all *bona fide* settlers shall take full advantage of the opportunity provided to secure any needed loan, and full information with respect to same may be secured on application to the various Crown Lands Agents, or direct from the Settlers' Loan Commissioner, Toronto.

Sites for summer cottages under reasonable terms and conditions may be acquired by lease within the Government parks, including Algonquin Provincial Park, and by purchase in certain other sections of the province. Islands in Timagami are leased without building conditions, but islands elsewhere are sold in 5 acre parcels, subject in each case to the erection of a building costing not less than \$500 within 18 months.<sup>1</sup>

*British Columbia.*—In British Columbia there are large areas of free grant lands. Any British subject being the head of a family, a widow, a *femme sole* who is over 18 years of age and self-supporting, a woman deserted by her husband, or whose husband has not contributed to her support for 2 years, a bachelor over 18 years of age, or any alien on his making a declaration of his intention to become a British subject, may pre-empt free 160 acres of the unoccupied and unreserved surveyed Crown lands, not being an Indian settlement and not carrying more than 8,000 feet per acre of milling timber west of, and 5,000 ft. per acre east of the Cascade Range. Fees payable

<sup>1</sup> Further particulars may be obtained on application to the Minister of Lands and Forests, Parliament Buildings, Toronto, Ont.

include \$2 for recording, \$2 for certificate of improvement and \$10 for Crown grant. Residence and improvement conditions are imposed. After occupation for 5 years and making improvements to value of \$10 per acre, including clearing and cultivation of at least 5 acres, the pre-emptor may obtain certificate of improvement and crown grant. The fact that an applicant has previously homesteaded in another province does not preclude him from pre-empting in British Columbia. Unsurveyed lands cannot be pre-empted.

Homesite leases of an area not exceeding 20 acres, surveyed or unsurveyed, for occupation and cultivation can be obtained—this being a provision to enable fishermen, miners or others to obtain homesites—at small rental, under improvement conditions, including building of dwelling in first year, title being procurable after five years' occupation and completion of survey.

Under the Land Act vacant and unreserved Crown lands, surveyed or unsurveyed, can be purchased in quantities not exceeding 640 acres for agricultural purposes, on improvement conditions. The Minister may require improvements to the value of \$5 per acre with 4 years of allowance of the sale and Crown grant may be withheld until it is certified that improvements are made. Price of first class (agricultural) lands is \$5 per acre; second class (grazing) lands \$2.50 an acre.

Crown lands are leased, subject to covenants and agreements deemed advisable, for agricultural or industrial purposes—for hay-cutting, up to 10 years; for other purposes, except timber-cutting, up to 21 years.

The Land Settlement Board has selected a number of land settlement areas contiguous to the Canadian National Railways. Lands within these areas are sold on easy terms for farming purposes, conditional upon development, prices being usually from \$3 to \$10 an acre, a small cash payment being required and the balance spread over a term of years to suit purchaser. Returned British Columbia soldiers are entitled to abatement of \$500 on purchase price. The Board has power to enforce orders on those owning land within an area to improve and to levy a penalty tax for failure; also power to procure compulsory sale of undeveloped land. To established settlers loans are made by the Board for development purposes from \$250 to \$10,000, not exceeding 60 p.c. of improved value of land offered as security.

Timber-cutting rights are acquired by timber-sale. The applicant locates the timber, and on application being made the area is cruised, surveyed if necessary, and advertised for sale by tender. All particulars are obtainable from the Forest Branch, Department of Lands. Information regarding water-rights, for power, irrigation, etc., can be obtained by addressing the Water Rights Branch, Department of Lands.

The area of land administered by the province is 223,619,650 acres, of which 199,388,733 acres are vacant and unreserved; 4,591,991 acres are included in Indian, park, game, forest and other reserves and 9,094,127 acres in timber, pulp, coal, grazing and other leases or

licenses. The total area of surveys is 32,574,987 acres, including 22,510,903 acres of land surveys, 8,945,119 acres of timber, 652,848 acres of coal lands and 466,117 acres of mineral claims. The area included in cities is 56,270 acres and in district municipalities 888,378 acres. The area of the province is 238,469,600 acres, of which 92,800,000 acres is above timberline, and 91,432,100 acres is forested—39,352,000 acres carrying over 1,000 ft. per acre and 17,281,600 acres from 5,000–30,000 ft. per acre. The area suitable for agriculture is estimated at 22,608,000 acres. On Vancouver island, an area of 2,110,054 acres is included in the Esquimalt and Nanaimo Ry. land grant, embracing the southeastern portion of the island, and applications for lands in this area are made to the land agent of that railway at Victoria.

**8.—Homestead Entries in Manitoba, Saskatchewan, Alberta, and British Columbia, by Nationalities, made during the Fiscal Years 1916-1921.**

Nationalities.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.
Canadians from Ontario.....	1,885	1,500	1,179	599	937	665
“ Quebec.....	505	496	425	260	298	270
“ Nova Scotia.....	137	124	138	53	106	78
“ New Brunswick.....	82	70	87	31	83	52
“ Prince Edward Island.....	54	51	49	17	47	37
“ Manitoba.....	1,137	657	403	238	365	237
“ Saskatchewan.....	280	284	177	75	126	105
“ Alberta.....	310	233	158	87	144	134
“ British Columbia.....	63	68	47	28	37	27
Persons who had previous entry.....	2,779	1,642	1,087	606	875	871
Newfoundlanders.....	14	4	8	2	10	8
Canadians returned from the United States.....	19	17	10	6	13	3
Americans.....	2,416	1,734	2,084	870	1,318	1,072
English.....	2,374	1,469	883	639	1,252	821
Scotch.....	700	496	285	182	360	242
Irish.....	314	194	142	87	154	114
French.....	111	65	54	38	58	32
Belgians.....	103	46	39	19	26	36
Swiss.....	37	30	24	8	13	18
Italians.....	100	48	25	21	12	19
Roumanians.....	40	24	19	7	10	12
Syrians.....	5	5	2	1	4	1
Germans.....	170	75	10	7	5	22
Austro-Hungarians.....	1,745	735	125	38	69	170
Dutch.....	50	41	42	15	13	9
Danes (other than Icelanders).....	100	57	46	29	35	46
Icelanders.....	74	36	38	10	20	14
Swedes.....	342	235	195	60	82	71
Norwegians.....	309	226	248	83	92	84
Russians (other than Mennonites, Doukhobors and Finns).....	719	489	217	74	105	91
Chinese.....	4	—	1	4	1	—
Japanese.....	2	3	2	2	—	—
Persians.....	—	—	2	—	—	—
Australians.....	4	10	6	1	5	2
New Zealanders.....	2	—	2	—	1	1
Greeks.....	3	1	—	1	1	2
Hindus.....	4	3	—	—	—	—
Bulgarians.....	4	2	4	—	—	—
Serbians.....	4	2	2	1	4	—
Spaniards.....	—	3	1	—	—	—
Turks.....	4	—	—	—	—	—
Hebrews.....	6	—	2	—	—	—
Other nationalities.....	19	24	46	28	51	23
<b>Total.....</b>	<b>17,030</b>	<b>11,199</b>	<b>8,319</b>	<b>4,227</b>	<b>6,732</b>	<b>5,399</b>

## 9.—Receipts of Patents and Homestead Entries in the Fiscal Years 1916-1921.

Sources of Receipts.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$
Homestead fees.....	170,350	112,110	83,180	42,190	67,460	53,880
Cash sales.....	1,073,970	2,707,204	3,046,092	2,192,861	2,799,605	1,721,172
Scrap sales.....	—	333	131	323	80	—
Timber dues.....	378,961	429,403	482,006	408,728	589,780	705,314
Hay permits, mining, stone quarries, etc., cash.....	493,281	600,934	630,473	630,976	896,414	1,234,558
All other receipts.....	327,078	340,254	315,928	341,204	385,582	371,152
Gross revenue.....	2,443,640	4,190,238	4,557,810	3,616,282	4,738,921	4,086,076
Refunds.....	143,943	134,243	113,680	76,031	116,249	130,751
Net revenue.....	2,299,697	4,055,995	4,444,130	3,540,251	4,622,672	3,955,325
Total revenue, 1872 to date.....	50,778,457	54,834,452	59,278,582	62,819,848	67,442,520	71,397,845
Letters patent for Dominion lands...No.	18,989	18,774	23,227	16,810	17,732	17,947
Homestead entries.....“	17,030	11,199	8,319	4,227	6,732	5,389

## DEPARTMENT OF THE SECRETARY OF STATE.

The Department of the Secretary of State was constituted in its present form in 1873 through the merging of the previously-existing offices of the Secretaries of State for Canada and for the Provinces. The Secretary of State is the official mouthpiece of the Governor General, as well as the medium of communication between the Dominion and Provincial Governments, all correspondence between the two being conducted by him with the Lieutenant-Governor. He is also the custodian of the Great Seal of Canada and the Privy Seal as well as the channel by which the general public may approach the Crown.

The Secretary of State is also the Registrar General, registering all proclamations, commissions, charters, land patents and other instruments issued under the Great Seal. He is further charged with the administration of the Companies Act, the Canada Temperance Act and the Naturalization Act. The following information on these subjects has been secured in the course of administration.

**Charters of Incorporation.**—The number of companies incorporated under the Companies Act and amending Acts during the fiscal year 1920-21 was 852 (as against 991 in the previous year), with a total capitalization of \$752,062,683 (as against \$603,210,850 in the previous year). During the year Supplementary Letters Patent were granted to 229 companies, of which 135 increased their capital stock by the aggregate amount of \$79,803,000, 17 decreased their capital stock by \$7,698,300, the remaining 77 being granted Supplementary Letters Patent for various purposes such as changing names, extending powers, etc. The total capitalization of new companies plus the net increase of capital of existing companies amounted to \$824,167,383.

**Canada Temperance Act.**—Under Parts I and II of this Act provision is made for the prohibition of the sale of intoxicating liquors in counties and cities. During the calendar year 1921 a vote was taken upon the repeal of the Act in the city of Quebec. The repeal was carried by a large majority and became effective from the 22nd October, 1921. The Act was suspended by Order in Council without



the taking of a vote in the County of Peel, Ontario. Part IV of the Act relates to the prohibition of the importation of intoxicating liquors into the provinces. During the calendar year plebiscites were taken under this part in the Provinces of Ontario and New Brunswick and in the Yukon Territory. In all, six provinces have so far voted against the importation of intoxicating liquor.

**Naturalizations.**—The naturalizations effected under the Naturalization Act (R.S. 1906, c. 77) for the calendar years 1908–1917 inclusive, were given on page 594 of the Year Book for 1919. Since January 1, 1918, the only method of obtaining naturalization has been under what is known as the “Imperial” Naturalization Act, which came into force on January 1, 1915. This Act was known under the title of the Naturalization Act, 1914, until July 7, 1919, when it was repealed and the Naturalization Act, 1919, came into force. On July 1, 1920, the Naturalization Act, 1919, was repealed, and the Naturalization Act, 1914, was revived and amended under the title of the Naturalization Acts, 1914 and 1920. This latter Act is the one now in force. Table 10 shows the principal nationalities granted naturalization under these Acts during the calendar years from 1915 to 1921. It is a noteworthy fact that the number of certificates issued under the above Acts increased from 124 in the year 1915 to 8,773 in 1920 and 11,069 in 1921.

**10.—Naturalization in Canada by Principal Nationalities effected under the Naturalization Acts 1914–1920 during the Calendar Years 1915, 1916, 1917, 1918, 1919, 1920 and 1921.**

Nationalities.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Albanians.....	—	—	—	—	—	2	3
Americans.....	50	63	58	11	37	3,552	2,516
Arabians.....	—	—	—	—	—	1	—
Argentiniens.....	—	—	—	—	1	—	1
Austrians.....	—	—	—	—	—	13	182
Austro-Hungarians.....	—	—	—	—	—	3	25
Belgians.....	—	1	1	8	65	102	137
Bohemians.....	—	—	—	—	2	—	—
Brazilians.....	1	—	—	—	—	2	2
Bulgarians.....	—	—	—	—	—	3	5
Chinese.....	1	5	4	2	21	20	25
Czecho-Slovaks.....	—	—	—	—	1	102	143
Danes.....	9	3	12	16	115	133	171
Dutch.....	3	6	4	18	80	99	94
Dutch East Indies.....	—	—	—	—	—	—	—
Finns.....	—	—	—	—	17	111	152
French.....	3	5	3	7	128	127	158
Germans.....	—	—	—	1	—	112	257
Germans (Alsace-Lorraine).....	—	—	—	—	—	1	—
Greece.....	2	6	—	4	30	161	224
Hungarians.....	—	—	—	—	—	7	28
Italians.....	2	3	1	5	156	181	428
Japanese.....	9	17	31	15	82	125	135
Jugo-Slovaks.....	—	—	—	—	—	3	2
Luxembourgers.....	—	—	—	1	1	6	7
Montenegrins.....	—	1	—	—	1	4	4
Nationality undetermined.....	—	—	—	—	—	—	1
No nationality.....	—	—	—	—	2	1	3
Norwegians.....	5	11	4	34	210	366	299
Persians.....	—	—	—	—	—	3	4
Poles.....	—	—	—	—	58	1,232	1,997
Pole (Ukrainian).....	—	—	—	—	—	7	300
Pole (Russian).....	—	—	—	—	—	—	3
Portuguese.....	—	—	—	—	1	—	1
Re-admission.....	—	—	—	4	4	—	—

**10.—Naturalizations in Canada by Principal Nationalities, effected under the  
Naturalization Acts 1914-1920 during the calendar years 1915, 1916,  
1917, 1918, 1919, 1920 and 1921—concluded.**

Nationalities.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Roumanians.....	6	3	2	6	55	384	872
Russians.....	6	6	5	9	687	1,303	2,021
Serbians.....	—	—	—	3	3	24	4
Serb-Croat-Slovaks.....	—	—	—	—	—	22	122
Spaniards.....	—	—	—	3	4	5	3
Swedes.....	15	14	8	37	236	384	435
Swiss.....	8	10	1	10	39	51	69
Turks.....	1	—	—	—	—	2	10
Turk (Armenian).....	—	—	—	—	1	39	67
Turk (Assyrian).....	—	—	—	—	—	—	3
Turk (Greek).....	—	—	—	—	—	3	15
Turk (Macedonian).....	—	—	—	—	—	—	1
Turk (Mesopotamia).....	—	—	—	—	—	4	2
Turk (Palestine).....	—	—	—	—	—	1	1
Turk (Syrian).....	—	—	—	—	11	79	134
Venezuelans.....	—	—	1	—	—	—	—
Section 4 <sup>1</sup> .....	3	2	—	—	—	2	3
Section 11 s.s. (c) <sup>2</sup> Chap. 38, Nat. Act, 1919.	—	—	—	—	—	2	—
British in Canada.....	—	—	—	—	3	—	—
<b>Total.....</b>	<b>124</b>	<b>156</b>	<b>135</b>	<b>195</b>	<b>2,051</b>	<b>8,784</b>	<b>11,069</b>

<sup>1</sup> Under Section 4 of the Naturalization Act, 1914, the Secretary of State is authorized in his discretion to grant a special certificate of naturalization to any person with regard to whose nationality as a British subject a doubt exists.

<sup>2</sup> Resumption of British nationality by wife of alien being a subject of state at war with His Majesty.

## DEPARTMENT OF INDIAN AFFAIRS.

### The Indians of Canada.<sup>1</sup>

**Population.**—The Indians of Canada number about 100,000, not varying very much from year to year. Their numbers are, however, slowly increasing, and the popular notion that the race is disappearing is not in accordance with facts.

**Administration.**—Indians are minors under the law, and their affairs are administered by the Department of Indian Affairs under the authority of the Indian Act. This Department is the oldest governmental organization in the Dominion, dating back to the time of the Conquest. It was originally under the military authorities, and did not become a part of the civil administrative machinery until 1845. By section 5 of the British North America Act, 1867, the Indians of Canada and the lands reserved for them came under the control of the Dominion Government, and in 1873 an Act of the Canadian Parliament (R.S., c. 81) provided that the Minister of the Interior should be Superintendent General of Indian Affairs and as such have the control and management of the lands and property of the Indians in Canada. The aim of the Department of Indian Affairs is the advancement of the Indians in the arts of civilization, and agents have been appointed to encourage the Indians under their charge to settle on the reserve and to engage in industrial pursuits.

<sup>1</sup> Contributed by the Department of Indian Affairs.

Reserves have been set aside for the various bands of Indians throughout the Dominion, according to their respective requirements, and the Indians located thereon are under the supervision of the local agents of the Department. The activities of the Department as guardian of the Indians, include the control of Indian education, health, etc., the development of agriculture and other pursuits among them for their advancement, the administration of their funds and legal transactions and the general supervision of their welfare.

The educational work of the Department is now very extensive. A total of 321 Indian schools are in operation, comprising 247 day, 58 boarding and 16 industrial schools.

The local administration of the Indian bands on the reserves scattered throughout the Dominion is conducted through the Department's agencies, of which there are in all 114. The number of bands included in an agency varies from one to more than thirty. The staff of an agency usually includes various officers in addition to the agent, such as medical officer, clerk, farm instructor, field matron, constable, stockman, etc., according to the special requirements of the agency in question. The work of the agencies is supervised by the Department's inspectors, each inspector having charge of a certain number of agencies. Expenditures upon destitute Indians are made by the Dominion Government, either from public funds or from the tribal funds of the Indians.

The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised, he ceases to be an Indian under the law, and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in administering this problem, as Indians who become enfranchised lose thereby the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

**Linguistic Stock and Tribal Origin.**—The separate linguistic stocks that are generally recognized in Canada are Algonkin, Iroquoian, Siouan, Athapascan, Kootenay, Salish, Wakashan, Haida, and Tsimshian. The most numerous stock is the Algonkin, which extends from the Atlantic coast to the Rocky mountains, and includes the Micmacs of the Maritime Provinces, the Hurons and Algonkins, Maliseets and Naskapees of Quebec, the Ojibbewas or Chippewas of Ontario, and the Crees, Bloods, Peigans and Blackfeet of the Western Provinces. Next in strength to the Algonkin stock comes the Iroquoian stock (Six Nations Confederacy), which is not aboriginal to Canada, but migrated from the United States and is settled in Ontario and Quebec. The Athapascan stock covers the northern parts of Alberta, Saskatchewan, the North-West Territories, Yukon and the northern interior of British Columbia.

There are only a few bands of Siouans in Canada. They are found in the Prairie Provinces, and, like the Iroquois, migrated from the United States. With the exception of the Athapascan tribes of

the northern interior above referred to, the Indians of British Columbia appear to be wholly separate races from the other native inhabitants of Canada, their customs, arts and crafts, physical characteristics and temperament bearing no similarity to those of the Indians of the eastern and prairie provinces. The British Columbia Indians are divided into several linguistic stocks, namely, Kootenay, found in the southeastern interior, the Salish, which is the most numerous, in the southwestern part of the province, and the Wakashan or Kwawkiutl-nootka, and Haida and Tsimshian in the northern coastal districts.

**Treaties.**—In the older eastern provinces, the history of the Indians has been one of slow development with that of the community. In western Ontario and the Prairie Provinces, the situation has been different. There the rapid spread of civilization made it necessary to take prompt and effective measures to protect the moral claims of the Indians, which are recognized by the Government. Accordingly, treaties were entered into with the Indians whereby the latter ceded to the Crown their aboriginal title and interest in the country. In consideration of such cession, the Crown agreed to set aside adequate reserves, make cash grants, provide per capita annuities, give assistance in agriculture, stock raising, hunting, trapping, etc., as particular circumstances might require, provide education for the Indian children and otherwise safeguard the Indians' interests. These treaties have been made from time to time as occasion arose, and as new territories were opened up. The last treaty to be made, Treaty No. 11, was effected in the summer of 1921, and covered the Mackenzie River district, where it was necessary to protect the Indian interests, owing to the oil rush and consequent rapid settlement of the country. No treaty has been made with the Indians of British Columbia, but their welfare has received no less attention from the Government on that account.

**Industries and Occupations.**—The industries and occupations of the Indians do not vary greatly from those of the other sections of the community in the localities in which their reserves are respectively situated. In the remoter and more unsettled parts of the country, however, hunting and trapping is still their chief source of livelihood. This, and the manufacture of native wares, may be said to be the only distinctively Indian vocations. A considerable number of Indians have qualified in the professions and those holding degrees are *ipso facto* enfranchised by the Indian Act. Almost every industry, trade and occupation now has its Indian representatives.

**Maritime Provinces.**—In the Maritime provinces the Indians are variously engaged in the occupations of hunting, fishing, trapping and farming, according to the respective locations of their reserves.

**Ontario and Quebec.**—Mixed farming is the principal occupation of the Indians in the settled parts of Ontario and Quebec. They have made marked progress in agriculture, especially in Ontario, during the past few years. The Department of Indian Affairs employs



special travelling agricultural representatives who visit the Indians' reserves and schools, giving instruction and advice in order to promote the adoption of modern agricultural methods. This policy has proven most effective. The Indians of Ontario and Quebec still derive considerable income from the manufacture of their native wares, such as baskets, moccasins, snow-shoes, etc. Hunting and trapping is still the principal means of livelihood among the Indians of the northern and more outlying parts of Ontario and Quebec.

*Prairie Provinces.*—Grain and stock raising are the principal occupations of the Indians of the Prairie provinces. The advancement of these western Indians during the past few years has been notable. When the Government took charge of these Indians after the disappearance of the buffalo, they were in a destitute and helpless condition and had to be rationed. The Department of Indian Affairs inaugurated the policy of instructing the Indians in modern methods of farming and the care of cattle, with a view to placing them eventually on a self-supporting basis. The money derived from the surrender and sale of Indian lands has been applied to the purchase of modern agricultural implements, the construction of better houses on the reserves, and other improvements. The problem of transforming a race of nomadic hunters into tillers of the soil is a formidable one, but in the case of the Indians of the plains the efforts of the Government in this direction have met with remarkable success. As a result of the agricultural and stock-raising operations among these Indians, rationing is practically a thing of the past, except in the cases of those who are aged or invalids, and, therefore, unable to support themselves. It is part of the duty of the Indian Department to support and care for destitute Indians, just as municipalities and organized charities are obliged to look after those in a similar condition in white communities.

Instruction in farming and the care of stock is now given at the majority of the Indian schools, and the educational work among the young Indians is in this manner linked up with the agricultural advancement on the reserve. Upon leaving school an Indian pupil is assisted by a grant of cattle or horses, implements, tools and building material. This method of encouragement has proven to be a prominent factor in moulding the life of the Indian communities, and although disappointing individual cases are inevitable, the record of the ex-pupils on returning from the schools to the reserves is on the whole very satisfactory and amply repays the trouble and expense entailed in their education. A number of industrial schools for Indians have been established, which correspond on a smaller scale to the agricultural colleges of white communities.

*British Columbia.*—The principal occupations of the Indians living on the coast of British Columbia are fishing and working in salmon canneries. Many of the Indian fishermen have gasoline launches which they construct themselves with great skill and efficiency. Mixed farming is the principal occupation of the more advanced Indians in the interior agricultural parts of the province. In the

northern interior districts hunting and trapping continue to be the principal occupations of the Indians.

*North West Territories and Yukon.*—The Indians of these parts are almost solely dependent on fishing and hunting.

**Health, Sanitation and Dwellings.**—The health of the Indians generally does not differ very greatly from that of the other sections of the community, with the exception that they are even more susceptible to tuberculosis than other races. The standards of sanitation among them are not so good as might be desired, but there is a marked improvement from year to year. The officers of the Indian Department are paying particular attention to prophylactic instruction amongst them.

Aboriginally, the Algonquins and Athabascans dwelt in tepees, and the Iroquois in long houses of log construction. The British Columbian coast Indians dwelt in large barn-like community houses of frame construction, a few of which are still in use in the more backward villages. The houses of the Indians throughout the Dominion are now much the same as those of other people, although in the more remote and inaccessible parts a few still live in tepees.

**The Indians in the Great War.**—The Indians of Canada established a proud record in the Great War and well maintained the traditional loyalty of their ancestors who supported the British cause in 1776 and 1812. More than four thousand Indians enlisted with the Canadian Expeditionary Force, notwithstanding the fact that they were specially exempted from the operation of the Military Service Act. The Indian soldiers gave an excellent account of themselves at the front and were highly commended for their courage, intelligence, stamina and discipline. They excelled as sharp-shooters, and the tales of their individual prowess will live long in the history of the Dominion. The Indian returned soldiers are doing well and are taking advantage of the Soldiers' Settlement Act, which applies to them in the same manner as to other returned soldiers.

The Indians contributed upwards of \$50,000 to the Patriotic, Red Cross and other War Funds, and on many of the reserves the Indian women were very active in Red Cross and other war work.

**Statistical Tables.**—Tables 11-16, compiled from the Reports of the Department of Indian Affairs, give for the years named particulars respecting population, religion, education, agriculture and financial status. Table 16 shows that during the year 1920 crops to the value of \$3,577,119 were raised by the Indians; the corresponding value in 1919 was \$3,462,147. Educational advantages are provided for the Indians in day, boarding and industrial schools, and for educational purposes appropriations were made by Parliament amounting for the year 1920-21 to \$1,112,419. Several bands of Indians assist, and during the fiscal year 1920-21 the sum of \$47,297 was available from this source. As shown in Table 12, the total number of Indian children enrolled as attending school during the fiscal year 1921 was 12,558, and the average attendance was 8,723.

The total expenditure from appropriations of the Indian Department for the year 1920-21 is \$2,090,163. On March 31, 1921, the Indians had to the credit of their trust funds \$11,458,661, derived from sales of lands and timber and from rentals of grazing and other lands. The amount named represents an increase of \$558,604 over that of the preceding year.

### 11.—Indian Population in Canada, by Provinces, 1911-1917.

Provinces.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
Prince Edward Island.....	292	300	292	288	288	302	292
Nova Scotia.....	2,026	1,969	2,018	2,050	2,042	2,119	2,031
New Brunswick.....	1,802	1,903	1,920	1,906	1,862	1,874	1,846
Quebec.....	11,462	12,817	12,842	12,935	13,174	13,348	13,366
Ontario.....	22,496	26,393	26,077	26,419	26,162	26,305	26,411
Manitoba.....	6,104	10,373	10,822	10,290	10,798	11,935	11,583
Saskatchewan.....	9,439	9,545	9,699	9,779	9,775	9,962	10,646
Alberta.....	8,088	8,113	9,228	8,281	8,500	8,682	8,837
British Columbia.....	24,581	24,781	25,172	25,370	25,399	25,737	25,694
Yukon.....	3,500	3,500	1,389	1,528	1,528	1,528	1,528
Northwest Territories.....	13,871	5,262	8,030	4,928	4,003	3,769	3,764
<b>Indians in Canada.....</b>	<b>103,661</b>	<b>104,956</b>	<b>106,490</b>	<b>103,774</b>	<b>103,531</b>	<b>105,561</b>	<b>105,998</b>
Eskimos.....	4,600	4,600	3,447	3,447	3,447	3,296	3,296

### 12.—Attendance of Pupils at Indian Schools, by Provinces, fiscal year ended March 31, 1921.

Provinces.	Number of Schools.	Number of Pupils on Roll.			Average Attendance.	Percentage of attendance.
		Boys.	Girls.	Total.		
Prince Edward Island.....	2	23	19	42	17	40.47
Nova Scotia.....	14	117	129	246	114	46.34
New Brunswick.....	12	134	130	264	167	63.25
Quebec.....	30	615	719	1,334	826	61.92
Ontario.....	91	1,816	1,774	3,590	2,062	57.44
Manitoba.....	51	974	970	1,944	1,203	61.83
Saskatchewan.....	33	661	676	1,337	1,012	75.69
Alberta.....	24	522	511	1,033	825	79.86
British Columbia.....	57	1,188	1,205	2,393	2,233	93.31
Yukon.....	5	66	80	146	86	58.90
Northwest Territories.....	7	103	126	229	178	77.73
<b>Total.....</b>	<b>326</b>	<b>6,219</b>	<b>6,339</b>	<b>12,558</b>	<b>8,723</b>	<b>69.47</b>

### 13.—Acreage and Value of Indian Lands, by Provinces, 1921.

Provinces.	Total acreage of reserves.	Land cleared but not under cultivation.	Land under cultivation.	Value of Lands.
	Acres.	Acres.	Acres.	\$
Prince Edward Island.....	1,527	400	401	20,000
New Brunswick.....	20,782	867	834	70,600
Nova Scotia.....	21,730	3,149	2,383	88,700
Quebec.....	158,767	16,193	9,953	1,369,745
Ontario.....	1,025,411	73,492	66,916	4,931,320
Manitoba.....	401,937	107,046	12,689	2,900,646
Saskatchewan.....	1,173,888	800,321	42,409	12,101,854
Alberta.....	1,307,346	870,010	54,324	17,705,830
British Columbia.....	731,090	280,466	31,918	12,842,697
<b>Total.....</b>	<b>4,842,478</b>	<b>2,151,944</b>	<b>221,827</b>	<b>52,031,392</b>

## 14.—Area and Yield of Field Crops of Indians, by Provinces, 1920.

Provinces.	Wheat.		Oats.		Other Grain.	
	Acres.	Bush.	Acres.	Bush.	Acres.	Bush.
Prince Edward Island.....	15	175	35	650	3	15
Nova Scotia.....	13	335	46	1,030	12	320
New Brunswick.....	30	300	121	560	41	626
Quebec.....	436	5,682	2,879	51,527	1,347	24,600
Ontario.....	3,696	43,361	11,438	326,931	3,913	79,912
Manitoba.....	3,235	32,981	1,929	35,571	1,460	13,781
Saskatchewan.....	9,205	117,884	14,202	265,239	483	5,114
Alberta.....	9,310	158,671	6,968	134,137	621	14,202
British Columbia.....	1,724	47,850	3,293	106,273	1,148	28,502
<b>Total.....</b>	<b>27,664</b>	<b>407,239</b>	<b>40,911</b>	<b>921,918</b>	<b>9,028</b>	<b>167,072</b>

Provinces.	Potatoes.		Other Roots.		Hay and Fodder.
	Acres.	Bush.	Acres.	Bush.	Tons.
Prince Edward Island.....	10	950	1	40	120
Nova Scotia.....	78	3,425	17	790	279
New Brunswick.....	215	4,620	13	684	320
Quebec.....	977	50,600	105	4,809	7,027
Ontario.....	1,763	81,856	1,392	28,684	33,017
Manitoba.....	447	28,965	56	2,341	19,680
Saskatchewan.....	110	9,343	45	3,444	43,895
Alberta.....	129	6,939	24	429	23,073
British Columbia.....	2,654	328,653	1,002	55,404	23,651
<b>Total.....</b>	<b>6,383</b>	<b>515,351</b>	<b>2,655</b>	<b>96,625</b>	<b>151,662</b>

## 15.—Numbers of Farm Live Stock of Indians, with Total Values, by Provinces, 1920.

Provinces.	Horses.	Cattle.	Poultry.	Value of Live Stock and Poultry.
	No.	No.	No.	\$
Prince Edward Island.....	14	29	80	3,500
Nova Scotia.....	83	406	1,310	24,640
New Brunswick.....	56	108	405	8,660
Quebec.....	1,079	4,658	13,164	230,946
Ontario.....	4,493	10,799	62,496	772,280
Manitoba.....	1,286	2,753	3,085	253,890
Saskatchewan.....	5,359	7,535	5,966	891,097
Alberta.....	10,170	5,977	2,573	756,068
British Columbia.....	12,619	20,402	32,595	1,099,889
<b>Total.....</b>	<b>35,159</b>	<b>52,667</b>	<b>121,674</b>	<b>4,040,970</b>

## 16.—Sources and Values of Income of Indians, 1920.

Provinces.	Value of			Re- ceived from Land Rentals.	Earned by			Total Income of Indians.
	Farm Products including Hay.	Beef Sold or used for food.	Wages Earned.		Fish- ing.	Hunting and Trapping.	Other Indus- tries.	
	\$	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island...	3,000	500	1,500	—	1,000	100	7,000	13,100
Nova Scotia.....	22,450	5,010	77,950	—	7,040	8,950	41,905	164,213
New Brunswick.....	9,900	260	31,200	5,320	3,260	2,450	7,875	62,456
Quebec.....	316,820	38,775	461,033	25,637	8,270	133,465	110,726	1,110,259
Ontario.....	883,819	55,890	1,131,043	77,591	176,235	452,422	129,449	3,230,133
Manitoba.....	212,338	17,715	168,310	1,026	81,175	153,985	61,295	765,144
Saskatchewan.....	764,916	119,162	124,703	26,745	34,205	92,291	112,394	1,421,344
Alberta.....	508,977	57,753	140,014	105,042	4,140	26,315	96,770	1,060,892
British Columbia.....	854,899	72,990	591,020	43,502	731,435	233,932	293,080	2,842,909
<b>Total.....</b>	<b>3,577,119</b>	<b>368,055</b>	<b>2,726,773</b>	<b>284,863</b>	<b>1,046,760</b>	<b>1,103,910</b>	<b>860,494</b>	<b>10,670,550</b>



**PUBLIC WORKS.**

Since Confederation and before, the Department of Public Works has been known as the constructing department. In 1879 the railways and canals were placed under control of a new department, the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department, and the smaller drill halls and armouries to the Department of Militia and Defence. The work of the Department of Public Works is now divided into three principal branches, viz., the Engineering Branch, the Architect's Branch, and the Telegraph Branch.

**Engineering.**—The Engineering Branch comprises the construction and repair of wharves, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, maintenance and operation of government dredging plant; the construction and maintenance of graving docks; the construction, maintenance and working of slides and booms; the construction and maintenance of interprovincial bridges and approaches thereto, and of bridges on highways of federal importance in the Northwest Territories and the maintenance of military roads; also hydrographic and ordinary surveys and examinations, inclusive of precision levelling and geodetic measurements which are required for the preparation of plans, reports and estimates; the testing of cements, etc. The Branch has charge of about 1,700 harbour works, 4 graving docks, 4 slide and boom works, interprovincial bridges, 40 dredges and 228 tugs, scows and other dredging plant.

**Architecture.**—The Architect's Branch builds and maintains government buildings, post offices, custom houses, examining warehouses, and constructs quarantine, immigration and experimental farm buildings, armouries, military hospitals and drill halls, land offices and telegraph offices. The most important public building now under construction is that of the new Houses of Parliament at Ottawa.

**Telegraphs.**—The Telegraph Branch has control over the construction, repair, and maintenance of all government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia, and the Yukon, and statistics relating to them are given on page 581.

**Graving Docks.**—There are four graving or dry docks completed and owned by the Canadian Government. The dimensions of these docks are shown in Table 17. The dock at Kingston, Ontario, is under lease to the Kingston Shipbuilding Company. The dock at Levis, Quebec, east of the old dock, is 1,150 feet long, divided into two parts (650 and 500 feet respectively), and 120 feet wide; it has a depth at high water of 40 feet. It cost about \$3,500,000. A new dock is under construction at Esquimalt, B.C.; the dimensions are given in Table 17. Under the Dry Dock Subsidies Act, 1910

(9-10 Edw. VII, c. 17)<sup>1</sup>, several docks have been subsidized by payments of 3 or 3½ p.c. per annum on the original cost for a given number of years, as shown by Table 18.

**17.—Dimensions of Graving Docks owned by the Dominion Government.**

Location.	Length.	Width at			Depth of water on sill.	Rise of tide.	
		Coping.	Bottom.	Entrance.		Spring.	Neap.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
Levis, Que.....	600·3	100	59·3	67·6	25·8	18	13·3
Esquimalt, B.C.....	430	90	41	65	26½	7 to 10	3 to 8
Esquimalt (New).....	1·156	135	125	125	40	7 to 10	3 to 8
Kingston, Ont.....	308·6	79	47	55	14½ & 16½	—	—
Lauzon, Que.....	1,150	144	105	120	40 H.W.	18	13·3

**18.—Dimensions and Cost of Graving Docks subsidized under the Dry Dock Subsidies Act, 1910.**

Location.	Length.	Width.	Depth over sill.	Total cost.	Subsidy.
	Feet.	Feet.	Feet.	\$	
Collingwood No. 1, Ont.....	515·10	59·8	16	500,000	3 p.c. for 20 years.
Collingwood No. 2, Ont.....	413·2	95	16	306,965	3 p.c. for 20 years.
Port Arthur, Ont.....	708·3	77·6	16·2	1,258,050	3 p.c. for 20 years.
Montreal, Que.....	600	100	27½	3,000,000	3½ p.c. for 35 years.
Prince Rupert, B.C.....	600	100	25	2,199,168	3½ p.c. for 25 years.
Sault Ste. Marie, Ont.....	650	77	18½	1,326,529	3 p.c. for 20 years. <sup>1</sup>
Toronto, Ont.....	300	80	15	894,121	3 p.c. for 20 years. <sup>1</sup>
St. John, N.B.....	1,150	(Plans not yet approved, but will be similar to those of the new Levis dock.)			

<sup>1</sup>Not yet commenced.

**Expenditure and Revenue.**—Table 19 shows the expenditure and revenue for the fiscal years 1916-21 of the Public Works Department of the Dominion Government. For the fiscal year 1921 the expenditure was \$20,970,674, as compared with \$20,455,460 in 1920, an increase of \$515,214, due in the main to an increase in the expenditure on harbour and river works from \$4,320,581 to \$7,541,668. This was nearly counterbalanced by a diminished expenditure on military hospitals from war appropriation, \$1,217,892, as compared with \$4,337,127.

<sup>1</sup>For description of this Act, see Canada Year Book, 1910, p. xxviii.

### 19.—Expenditure and Revenue of the Public Works Department for the fiscal years 1916-1921.

#### EXPENDITURE.

Items.	1916.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$	\$
Harbour and river works...	7,401,896	6,548,568	5,551,774	3,181,349	4,320,581	7,541,668
Dredging plant, etc.....	3,875,713	2,410,413	1,405,838	677,500	1,205,486	1,456,243
Slides and booms.....	115,418	111,876	64,859	56,169	33,339	1
Roads and bridges.....	44,742	38,266	18,991	24,952	202,888	196,209
Public buildings.....	6,857,206	5,717,450	5,843,289	7,466,679	8,442,124	8,443,892
Telegraphs.....	742,692	775,340	751,452	789,883	885,730	1,083,242
Miscellaneous.....	501,631	559,683	419,005	706,464	1,028,185	1,031,528
<b>Total.....</b>	<b>19,539,298</b>	<b>16,161,596</b>	<b>14,055,208</b>	<b>12,902,996</b>	<b>16,118,333</b>	<b>19,752,782</b>
From War Appropriation for Military Hospitals.....	—	—	—	8,492,504	4,337,127	1,217,892
<b>Grand total.....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>21,395,500</b>	<b>20,455,460</b>	<b>20,970,674</b>

#### REVENUE.

	1916.	1917.	1918.	1919.	1920.	1921.
Slides and booms.....	108,228	97,142	26,188	16,763	48,133	1
Graving docks.....	64,216	64,919	56,484	72,428	81,148	64,918
Rents.....	90,129	94,729	106,205	101,664	143,355	128,148
Telegraph lines.....	181,227	191,453	204,878	231,332	277,749	330,470
Casual revenue.....	65,106	45,017	27,737	108,295	81,073	199,583
Ferries.....	—	—	—	—	1,632	2,010
<b>Total.....</b>	<b>508,906</b>	<b>493,260</b>	<b>421,492</b>	<b>530,482</b>	<b>633,090</b>	<b>725,129</b>

<sup>1</sup>In 1920-1921, the slide and boom works were leased or transferred to operating companies.

### HARBOUR COMMISSIONS.

A number of the harbours of Canada are administered by corporate bodies known as Harbour Commissions. Each Commission is constituted by a special Act of the Dominion Parliament, the number of Commissioners varying from three to five. The property of the Crown in the harbour is placed under the jurisdiction of the Commission and the Commissioners are authorized to acquire and hold real and personal property for the improvement and development of the harbour; but any property acquired from the Crown may not be alienated or in any way disposed of by the Commissioners without the consent of the Governor in Council. The Commissions are given power to make by-laws for all purposes of governing the harbour, and for the imposition and collection of rates on vessels and on cargo landed and shipped in the harbour, and penalties for infraction of their by-laws (but every such by-law must be confirmed by the Governor in Council before becoming effective), and they have control of the expenditure of the revenue received from these sources. For the purpose of harbour development and the construction of improvements, the Commission may, with the consent of the Governor in Council, expropriate land and borrow money on debentures issued against the security of the real and other property of the harbour. For the harbours of Quebec, Montreal and Vancouver the Dominion Government has advanced the Commissioners large

sums against such debentures. All the Commissions are under the direct inspection of an official of the Marine Department and are subject to the jurisdiction of the Minister of Marine and Fisheries in all matters.

The following harbours are administered by a Commission, the date of the Act under which each Commission received its present constitution and powers being given:—Montreal, 1894; Quebec, 1899; Three Rivers, 1882; Toronto, 1911; Hamilton, 1912; Belleville, 1889; Winnipeg and St. Boniface, 1912; Vancouver, 1913; New Westminster, 1913; North Fraser, 1913. The harbours of North Sydney and Pictou, Nova Scotia, were formerly under the Commission form of administration, but the legislation providing for Commissions in these harbours was repealed and all property and rights held by the Commissioners were revested in His Majesty by legislation passed in the years 1914 and 1920, respectively, repeal being effective from the 1st of January following in each case.

### NATIONAL GALLERY.

The National Gallery of Canada was the outcome of the establishment in 1880 by the Marquis of Lorne and H.R.H. Princess Louise of the Royal Canadian Academy of Arts, which required the elected Academicians to deposit their diploma pictures in the National Gallery at Ottawa. The collections of pictures, statuary and other works of art now occupying premises in the Royal Victoria Museum in Ottawa consist of purchases made by means of the annual grants voted by the Dominion Parliament, the diploma works of the members of the Royal Canadian Academy and gifts and loans by persons interested in art. In 1907 an Advisory Arts Council of three members was appointed by authority of an Order in Council, and in 1913, under the National Gallery of Canada Act (3-4 Geo. V., c. 33), the Advisory Arts Council was constituted the Board of Trustees for the management of the National Gallery and the administration of its annual grants.

In addition to the care and management of the National Gallery, the Act imposes upon the Board responsibility for "the encouragement and cultivation of correct artistic taste and Canadian public interest in the fine arts, the promotion of the interests generally of art in Canada."

Amongst the collections of oil paintings now in the National Gallery are works by such old masters as Tintoretto, Caravaggio, Andrea del Sarto, Bartholomaeus de Bruyn, Luca Giordano, Cima da Conegliano, Frans Floris, Chardin, Hogarth, Snyders, Daniel Mytens. The more modern schools include representative works by the great English masters: Reynolds, Hoppner, Beechey, Lawrence, Gainsborough, Millais, Leighton, Holman Hunt. The French masters include J. F. Millet, Edgar Degas, Claude Monet, Alfred Sisley and a number of others, while the contemporary British school is strongly represented by fine examples of the work of such artists as Arnesby Brown, Laura Knight, Glyn Philpot, W. Orpen, D. Muirhead,



G. Henry, Austen Brown, Adrian Stokes and many others. The Gallery includes an excellent and representative exhibition of the work of Canadian artists both past and present.

The National Gallery collections of engravings, etchings, lithographs, etc., have been developed and formed into a department of prints with a special curator at the head. Important acquisitions have recently been made to it of works by Mantegna, Robetta, Nicholetto, Rosex, D. Campagnola, Marcantonio, Canaletto; Master M.Z., Schongauer, Durer, Altdorfer, Aldegrever, Pencz, Hirschvogel, Hollar; Master W.C.I.E.F., Van Dyck, van Leyden, Rembrandt, Ostade, Potter, van de Velde, Bega, Berchem, Ruysdael; Duvet, Gellee, Mellan, Morin, Nanteuil, Drevet, Jacque, Millet, Corot, Raffet, Isabey, Bonington, Meryon, Braquemond, Jacquemart, Legros, Lepere; Harding, Blake, Crome, Daniel, Wilkie, Geddes, Haden, Short, Strang, McBey, Brangwyn, Shannon, Gabain; Whistler, Zorn.

One of the most important activities of the National Gallery is its Loan Exhibition work. Under this policy the National Gallery lends to any art body or society in Canada, which possesses the necessary facilities, a collection of Canadian paintings, either for one year or for shorter periods. During 1921 sixteen (16) loans have been distributed, and practically every important city in Canada has thereby gained a better knowledge of Canadian art. The aggregate value of loans made during the past five years is over \$1,000,000.

After having been closed to visitors since February, 1916, during which time the halls were occupied by the Houses of Parliament, the National Gallery was reopened September 12, 1921, with extended premises and augmented collections of art objects.

## PUBLIC DEFENCE.

**Military Forces.**—Before the outbreak of the war, the Canadian Militia consisted of a Permanent Force, which on March 31, 1914, numbered 3,000 officers, non-commissioned officers and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. Subsequently to the outbreak of the war on August 4, 1914, successive contingents of troops of all arms were recruited, equipped, trained and despatched by the Canadian Government to Great Britain for active service as part of the Imperial forces. When hostilities ceased on November 11, 1918, there had been sent overseas for active service in the Canadian Expeditionary Force about 418,000 officers, non-commissioned officers and men.

Table 20 showing the militia expenditure and revenue for the five fiscal years 1917 to 1921, is taken from the Report for the year ended March 31, 1921, of the Militia Council. This table shows that the ordinary expenditure of the Department of Militia and Defence for the year ended March 31, 1921, was \$10,058,625, as compared with \$4,634,516 for 1920, \$3,444,954 for 1919, \$3,893,896 for 1918, and \$4,359,289 for 1917. The ordinary revenue amounted to \$277,309 for the year ended March 31, 1921, as compared with \$194,820 for 1920, \$118,019 for 1919, \$86,354 for 1918 and \$169,254 for 1917.

## 20.—Expenditure and Revenue of Militia for the fiscal years 1917-1921.

Schedule.	1917.	1918.	1919.	1920.	1921.
	\$	\$	\$	\$	\$
Allowances for drill instruction, care of arms, and postage.....	47,573	70,794	51,283	91,214	75,418
Annual drill.....	—	—	—	34,059	451,027
Cadet Corps.....	80,311	90,771	68,770	74,414	230,288
Clothing and necessaries.....	39,191	—	—	—	31,411
Contingencies—including guards of honour, escorts and salutes.....	23,214	16,344	5,338	8,762	38,461
Custom dues.....	68,780	2,212	—	—	19,788
Departmental Library.....	641	615	1,043	974	846
Dominion arsenal.....	29,924	—	—	—	637,423
Engineer services.....	396,895	364,529	304,144	319,486	575,518
Grants to artillery and rifle associations and to regimental bands.....	7,981	10,258	2,549	27,328	64,536
Gratuities and compassionate allowances.....	—	—	1,002	3,326	—
Maintenance of military properties.....	164,166	173,344	101,352	120,962	221,047
Pay of Insp.-Gen. and military members of Militia Council (statutory).....	18,290	18,152	18,010	18,010	292,831
Pay of headquarters staff.....	84,766	93,998	103,154	127,844	
Pay of division and district staffs.....	123,536	112,397	113,693	161,599	5,705,736
Permanent force—pay, provisions and supplies.....	2,396,183	2,297,228	1,947,304	3,088,691	
Printing and stationery.....	70,000	69,871	61,667	52,391	75,206
Royal Military College.....	147,576	162,293	201,885	219,160	321,309
Salaries and wages of civil employees.....	205,801	232,913	210,066	197,459	291,741
Schools of instruction—pay of active militia attending.....	81,384	7,899	—	—	21,958
Topographical survey.....	31,274	31,406	31,082	40,522	45,125
Transport and freight.....	43,923	41,306	16,698	24,854	315,443
Warlike stores.....	15,753	—	—	—	361,303
Training areas.....	224,623	68,838	4,643	5,041	10,612
Miscellaneous small votes.....	—	22,670	190,371	15,731	172,001
Ordnance, ammunition, tents, wagons, saddlery and harness and equipment generally, excepting clothing.....	57,504	6,058	9,752	1,278	69,597
Consolidated Revenue, Workmen's Compensation Act.....	—	—	1,148	1,411	—
<b>Total Militia Expenditure.....</b>	<b>4,359,289</b>	<b>3,893,896</b>	<b>3,444,954</b>	<b>4,634,516</b>	<b>10,058,625</b>
Civil Government—salaries.....	173,798	183,448	189,578	202,459	212,732
Civil Government—contingencies.....	19,488	3,199	18,255	18,996	19,837
<b>Total Civil Government.....</b>	<b>193,286</b>	<b>186,647</b>	<b>207,833</b>	<b>221,455</b>	<b>232,569</b>
Revenue received—					
Militia.....	90,164	18,228	35,955	—	—
Casual.....	11,949	2,072	3,795	87,867	86,815
Royal Military College.....	41,646	39,177	54,428	53,599	70,107
Pension Act, 1901.....	25,495	26,877	23,841	47,979	120,387
Fines and Forfeitures.....	—	—	—	5,375	—
<b>Total revenue.....</b>	<b>169,254</b>	<b>86,354</b>	<b>118,019</b>	<b>194,820</b>	<b>277,309</b>

**Expenditure on Account of War Appropriations.**—Table 21 shows the total expenditures on war appropriation by the Department of Militia and by other departments, by fiscal years from 1914-15 to 1920-21. The total net expenditure by the Department of Militia is shown to be \$1,545,281,734 and by other departments \$142,121,965, a grand total of \$1,687,403,699. This amount might at first sight be considered as the cost of the war to Canada up to March 31, 1921, but it does not allow for interest charges which have been paid on the debt contracted for war purposes. This indeed can hardly be accurately separated from interest charges on the debt existing in 1914, but a comparison of the annual interest paid in the war years and down to 1921 will show that the direct cost of the war to the national treasury cannot have been less than \$2,000,000,000, exclusive of amounts spent on re-establishment and pensions.



## 21.—Expenditures on Account of War Appropriations for the Years ended March 31, 1915–1921—concluded.

Items of Expenditure.		1915.	1916.	1917.	1918.	1919.	1920.	1921.	Total 1915–1921.
<b>(A) BY THE DEPARTMENT OF MILITIA AND DEFENCE—concluded.</b>									
War service gratuities.....	\$	—	—	—	—	9,512,541	136,032,842	4,607,048	150,153,031
British recruiting mission, U.S.A.....	—	—	—	—	127,313	1,432,074	213,454	—	1,773,441
British and Foreign Governments, recoverable .....	—	—	—	—	1,291,873	—	4,873,439	—	6,165,312
Borden Camp land.....	—	—	—	137,981	216,005	—	684,202	—	1,038,188
Special remittance.....	—	—	—	—	—	—	1,037,244	—	1,037,244
Medical and dental services.....	—	—	—	—	—	—	—	236,222	236,222
Unitemized expenditure overseas.....	—	—	—	—	—	—	—	1,559,348	1,559,348
Miscellaneous items.....	39,101	—	—	22,957	—	—	—	1,877	63,955
<b>Total Expenditure by Militia and Defence.....</b>	<b>53,176,614</b>	<b>160,433,416</b>	<b>298,291,031</b>	<b>316,669,785</b>	<b>379,507,132</b>	<b>329,419,884</b>	<b>20,225,950</b>	<b>1,557,723,762</b>	
Less Credits.....	—	—	—	—	—	2,386,995	6,058,847	3,996,186	12,442,028
<b>Net Expenditure by Militia and Defence.....</b>	<b>53,176,614</b>	<b>160,433,416</b>	<b>298,291,031</b>	<b>316,669,785</b>	<b>377,120,137</b>	<b>323,360,987</b>	<b>16,229,764</b>	<b>1,545,281,734</b>	
<b>(B) BY OTHER DEPARTMENTS</b>									
Trade and Commerce.....	3,003,005	14,796	23,391	117,201	480,788	51,312	Expenditure	3,699,493	
Naval Service.....	3,096,125	3,274,020	3,806,329	9,666,229	11,298,999	6,780,905	by "other	37,922,607	
Justice.....	254,946	1,287,693	1,248,416	2,288,721	3,372,652	876,025	depart-	9,328,453	
Military Hospitals' Commission.....	—	—	1,378,078	11,393,655	7,000,000	5,000,000	ments	12,771,733	
Halifax Relief Commission.....	—	—	—	471,986	19,603,994	—	not	12,000,000	
Marine.....	—	1,530	2,158	185,321	11,831,233	—	specified"	20,079,668	
Soldiers' Civil Re-Establishment.....	—	94,344	142,751	26,692	9,021,979	4,424,005	—	11,831,233	
Public Works.....	12,865	—	—	1,196,851	179,165	2,102,576	—	13,881,261	
Immigration and Colonization.....	—	313,741	299,934	625,523	403,463	—	—	2,308,433	
Railways and Canals.....	178,845	349,672	634,825	749,608	813,484	6,879	—	3,018,357	
Post Office.....	110,098	428,543	661,902	1,070,666	5,162,489	3,606,803	—	2,664,566	
Other Departments.....	917,978	—	—	—	—	—	—	11,848,331	
<b>Total Expenditure by other Departments.....</b>	<b>7,573,862</b>	<b>5,764,339</b>	<b>8,197,784</b>	<b>27,166,930</b>	<b>69,399,302</b>	<b>23,251,968</b>	<b>767,780</b>	<b>142,421,965<sup>1</sup></b>	
<b>Grand Total Expenditure.....</b>	<b>60,750,476</b>	<b>166,197,755</b>	<b>306,488,815</b>	<b>343,836,715</b>	<b>446,519,439</b>	<b>346,612,955</b>	<b>16,997,544</b>	<b>1,687,403,699</b>	

<sup>1</sup> Includes \$767,780 expended in 1921, but not specified by departments.



**Royal Military College.**—The Royal Military College of Canada was founded in 1876 by Sir Alexander Mackenzie, Prime Minister of Canada. Since its foundation some 1,658 gentlemen cadets have been enrolled; of this number 153 are now in attendance and approximately 160, though their names appear on the College roll as having been admitted, either did not actually join or, if they did, were only at the College a very short time. Of the remainder, some died previous to August 4, 1914. Over 900 took part in the Great War, 147 of whom laid down their lives for king and country. Some 750 British and 75 foreign decorations have been awarded to ex-cadets, and many have risen to high rank in the service of their country. Three of the Canadian Divisions serving in France were commanded by ex-cadets and an ex-cadet also commanded one of the Australian Divisions at Gallipoli. The establishment of the College, as stated in the Act of 1874 (37 Vict., c. 36), was "for the purpose of imparting a complete education in all branches of military tactics, fortifications, engineering and general scientific knowledge in subjects connected with and necessary to a thorough knowledge of the military profession, and for qualifying officers for command and staff appointments." In addition to the foregoing, the course of instruction is such as to afford a thorough, practical and scientific training in civil engineering, surveying, physics and chemistry, English and French. Strict discipline, combined with physical training, riding, drill and outdoor games, forms part of the curriculum.

The College is situated on a beautiful peninsula, one mile from Kingston, with the Cataraqui river on the one side, emptying into the St. Lawrence river at its junction with lake Ontario, and Navy bay on the other. The grounds include about 500 acres on which are situated the buildings of the College proper, on the above-mentioned peninsula, comprising 60 acres. The remainder of the grounds are at the disposal of the College for use as a training area on which stands the historic fort Henry. On the point of the College peninsula is situated fort Frederick, built in 1837, when Kingston became capital of Canada, the fort comprising a portion of the defences of Kingston. The College is under the supervision of Militia Headquarters who annually appoint an advisory board composed of leading Canadian citizens both civil and military. The staff is composed of a commandant, a staff-adjutant, assisted by a competent staff of civil and military professors and instructors.

A four years' course leads to a "Diploma with Honours" or "Diploma" and "Certificate of Discharge." To graduates are annually offered a number of commissions in the Canadian Permanent Force as well as commissions in the Royal Artillery, Royal Engineers and other branches of the regular Britannic Army. To those graduates joining the Britannic Army, the privilege of one year's seniority is granted in the Britannic or Indian Armies. This has been arranged in order to equalize the seniority of graduates of the Royal Military College of Canada with those of Woolwich or Sandhurst, since the course at the latter institution is shorter than the Canadian. Positions

in the Public Works Department, Hydrographic Surveys, etc., are also available for graduates. The McGill University and the University of Toronto admit graduates to the third year in their Science Faculties, and the law schools also offer privileges.

**Department of the Naval Service.**

The Naval Service of Canada was established by the Naval Service Act, 1910, chapter 43. As established by that Act, the Department consisted of the following branches:—

1. Naval Service.
2. Fisheries Protection Service.
3. Tidal and Current Survey.
4. Hydrographic Survey.
5. Radiotelegraph Service.

In 1914 the Fisheries Service and Life Saving Service were transferred from the Marine Department to the Naval Department, but these two services were again placed under the Marine and Fisheries Department on July 1, 1920.

During the Session of 1922, the Government brought down legislation providing for the establishment of a Department of National Defence to be formed from the Department of Militia and Defence, Department of the Naval Service and the Canadian Air Board. This Act has by Proclamation been made effective Jan. 1, 1923.

On July 1, 1922, the Naval Service Department was re-organized preparatory to becoming part of the National Defence Department, and the Fisheries Protection Service, Tidal and Current Survey, Hydrographic Survey, Patrol of Northern Waters, and Radiotelegraph Service were placed under the jurisdiction of the Department of Marine and Fisheries.

During the Session of 1922 the Government announced its intention of establishing Naval Reserve Forces in Canada; it also announced that one destroyer and two patrol vessels would be maintained on each coast for training purposes, these ships to be manned by officers and men of the Royal Canadian Navy. In preparation for carrying out the programme announced by the Government, the cruiser "Aurora" and submarines "C.H. 14" and "C.H. 15" were placed in reserve, and the Royal Naval College of Canada at Esquimalt and the Youths' Training Establishment at Halifax, were closed. The dockyard at Halifax was reduced to a supply base, and all workshops were closed. Naval barracks for the accommodation of officers and men of the Royal Canadian Navy, and also of the reserve, were established at Halifax and Esquimalt, and full preparations were made for the organization and maintenance of the Naval Reserve Forces.

The headquarters offices of the Naval Department at Ottawa, were moved from the Hunter Building to the third and sixth floors of the Canadian Building, and the staffs have been re-organized in readiness for amalgamation in the formation of the Department of National Defence.

The total appropriation for the Naval Department for the fiscal year 1921-22 was \$4,097,070, of which sum \$3,514,029 was expended. The appropriation for the fiscal year 1922-23, excluding services transferred to the Marine Department, was \$1,500,000. Out of this amount \$736,000 was expended up to October 31, 1922.

#### **Air Board.**

The Air Board Act of 1919 (9-10 Geo. V, c. 11) empowered the Governor in Council to appoint an Air Board of from five to seven members, with a Minister of the Crown as chairman, to control aerodromes, aircraft, etc., and generally aerial navigation in Canada and its territorial waters. The work of the Board falls into three main divisions: control of civil aviation, the direction of flying operations for other Departments of the Government, and the direction of the Canadian Air Force. On December 31, 1921, there were 52 certificated private air pilots and 61 certificated commercial air pilots, as well as 147 certificated aircraft. Flights to the number of 1,209, covering 185,480 miles, were completed in 1921 from the civil government air stations at Vancouver, High River (Alberta), Victoria Beach, (Man.), Sioux Lookout (Ont.), Ottawa, Roberval (Que.), and Halifax, for various Departments of the Dominion and Provincial Governments. The Canadian Air Force, with headquarters at Ottawa and a training station at Camp Borden, had on its payroll in 1921, 54 officers and 239 airmen; but 1,281 officers and 1,350 airmen were on its establishment, of whom 505 officers and 1,166 airmen had been trained.

#### **Creation of the Department of National Defence.**

During the session of 1922, an Act (12-13 Geo. V, c. 34) was passed combining the Department of Militia and Defence, the Department of Naval Service and the Air Board into one Department, to be known as "The Department of National Defence." During the summer of 1922 re-organization of the Department was proceeded with and the new Department will be established as from Jan. 1, 1923.

#### **ROYAL CANADIAN MOUNTED POLICE.**

The Royal Canadian Mounted Police (formerly the Royal Northwest Mounted Police) are distributed throughout the Dominion, with headquarters at Ottawa. The operations of the force for the year ended September 30, 1921, are described in the Commissioner's Report for that year, which shows that during the year the Royal Canadian Mounted Police discharged numerous and varied functions, in several instances assisting provincial administrations in the maintenance of law and order, co-operating with the Dominion Department of Health in putting down the illicit traffic in narcotics, with the Secretary of State in inquiring into the suitability for citizenship of applicants for naturalization, with the Department of Marine and Fisheries in protecting property in cases of wrecks and in enforcing fisheries regulations, with the Post Office Department in tracking down mail robbers, with the Dominion Bureau of Statistics in the taking of the census in outlying communities, and with the Department of Indian Affairs

in the enforcement of the Indian Act, while important patrol work has been done in the Arctic regions. On September 1, 1921, the strength of the force was 70 officers, 1,610 non-commissioned officers and constables, 795 horses and 138 dogs, numbers showing only slight variation from the previous year. On February 1, 1920, under authority of an Act to amend the Royal Northwest Mounted Police Act (10 Geo. V, c. 28), the name of the latter force was changed to "Royal Canadian Mounted Police," the Dominion Police force was merged with it and its headquarters transferred from Regina to Ottawa.

**22.—Strength and Distribution of the Royal Canadian Mounted Police on September 30, 1921.**

Description.	Headquarters Staff.	British Columbia.	Alberta.	Saskatchewan.	Manitoba.	Northwest Territories.	Yukon Territory.	Ontario.	Quebec.	Maritime Provinces.	Baffin Island.	Total.
Commissioner.....	1	-	-	-	-	-	-	-	-	-	-	1
Asst. Commissioners....	1	1	-	-	-	-	-	-	-	-	-	2
Superintendents.....	3	-	2	3	2	-	-	-	-	-	-	14
Inspectors.....	3	9	11	8	5	1	1	2	1	-	-	50
Surgeons.....	1	-	-	1	-	-	2	2	1	1	-	2
Veterinary Surgeons....	-	-	-	1	-	-	-	-	-	-	-	1
Staff Sergeants.....	7	9	9	15	6	1	5	6	-	1	-	62
Sergeants.....	12	18	19	32	10	3	2	4	4	1	-	129
Corporals.....	12	34	36	38	27	5	9	25	7	1	-	216
Constables.....	23	179	162	212	106	16	29	316	11	24	1	1,078
Special Constables.....	16	15	27	19	6	2	4	33	2	1	-	125
<b>Total.....</b>	<b>79</b>	<b>265</b>	<b>266</b>	<b>329</b>	<b>162</b>	<b>28</b>	<b>52</b>	<b>440</b>	<b>26</b>	<b>32</b>	<b>1</b>	<b>1,680</b>
Horses.....	-	168	176	181	98	-	11	161	-	-	-	795
Dogs.....	-	-	-	-	19	80	34	5	-	-	-	138

**DEPARTMENT OF SOLDIERS' CIVIL RE-ESTABLISHMENT.**

Under Order in Council of June 30, 1915, the "Hospital Commission" was created to provide for the treatment of returning wounded and disabled soldiers, and in October of that year a revised Order in Council changed its name to "Military Hospitals Commission," and empowered it to carry on vocational training and to deal with the subject of employment.

Two Orders in Council were passed on February 21, 1918, one creating the Department of Soldiers' Civil Re-establishment and the other charging the Department of Militia and Defence with all active treatment cases except those suffering from tuberculosis, insanity and other diseases likely to be of long duration. This arrangement was confirmed by the Department of Soldiers' Civil Re-establishment Act, 1918 (8-9 Geo. V, c. 42).

The earlier activities of the Department of Soldiers' Civil Re-establishment have been described in the Year Book of 1920, pp. 21-29, to which the reader is referred for a general idea of the work of the Department in providing medical treatment, vocational training, retraining of the blind, provision of artificial limbs and appliances and post-discharge dental treatment. These activities naturally reached their maximum in the period following the armistice, the largest number of employees of the Department being 9,035 in March,



1920. On December 31, 1921, the total staff, after including 854 transferred during 1920 from the Board of Pension Commissioners, was 4,886, of whom 3,381 were males, 3,132 of these having been on active service in France, England or Canada.

At the close of 1921 the Department of Soldiers' Civil Re-establishment was directly operating 17 hospitals and indirectly 9, with a total bed capacity of 5,839 in Departmental and outside institutions and 824 in hospitals under contract. In-patients on December 31, 1921, numbered 5,053 and out-patients 287. In all of these hospitals dietitians who make monthly reports on food costs have been placed; an elaborate system of cost accounting is maintained.

Two psychopathic hospitals are now being operated by the Department, one at Westminster, near London, and the other at Ste-Anne de Bellevue, Que. Here all classes of nervous and mental diseases are treated, and the most up to date methods, including continuous baths and other hydrotherapeutic installations, are in use. There is also equipment for occupational therapy, including both indoor and outdoor work of a constructive nature as well as ward classes for bed patients and for those who are otherwise confined to the wards. To this work is detailed a special medical officer whose duty is to survey all patients and to make individual studies from the viewpoint of their physical and mental equipment, also of their occupational capacity and adaptability. The Department also has patients in a large number of provincial hospitals for the insane, and keeps close supervision, through the neuropsychiatric Branch of the Medical Service, over the treatment of these patients and the conditions under which they are living. On December 31, 1921, the number of neuropsychiatric patients on strength was: mental, 1,068; nervous, 569; total, 1,637.

**War Pensions.**—A Board of Pension Commissioners for Canada, consisting of three members, was created by Order in Council of June 3, 1916, (P.C. 1334) with exclusive jurisdiction and authority to deal with the granting and payment of naval and military pensions and other allowances to persons in the Canadian Naval Forces and the Canadian Expeditionary Force and to their dependants. There is no appeal from the decisions of the commission, but applicants may appear in person or by counsel before the commission to present complaints.

Under Orders in Council of April 12, 1921, (P.C. 1187), Aug. 17, 1921, (P.C. 2722), and Dec. 1, 1921, (P.C. 4500), and under authority of the Pension Act of 1919 (9-10 Geo. V, c. 43), the administration of the head office of the Board of Pension Commissioners was transferred to the Department of Soldiers' Civil Re-establishment as from April 1, 1921, the Pension Commissioners, however, continuing to exercise full power and authority in dealing with the granting and renewing of and adjudication upon pensions.

The scale of pensions has been revised several times by Orders in Council and Acts of Parliament. Under the existing scale of pensions for disability as established by Chap. 45 of the Statutes of 1921, twenty classes are provided, ranging from 100 p.c. or total disablement to 5 p.c. of disablement. The pensions range for the rank and file, according to

the class of disablement, from \$600 down to \$30 per annum (with a bonus of 50 p.c. of these amounts during the years commencing September 1, 1921, 1922 and 1923). The pensions for total disablement range from \$600 for the rank and file up to \$2,700 for persons of and above the rank of commodore or brigadier-general. Married members of the forces receive additional amounts ranging from \$300 per annum for 100 p.c. of disablement to \$15 per annum for 5 p.c. of disablement. Similarly, for disabled soldiers with children there is an additional pension ranging from \$180 to \$9 for the first child, from \$144 to \$9 for the second child, and from \$120 to \$6 for subsequent children. No pension is paid in respect of boys over 16 or girls over 17 except in case of their physical or mental infirmity, or where the child is making satisfactory progress in a course of instruction approved by the Commission, when the pension may be paid until the child has reached the age of 21. The existing scale of pensions in cases of death is given in Table 23, in cases of disability in Table 24, while Table 25 gives statistics of pensions in force on Dec. 31, 1921.

**23.—Scale of Annual Pensions granted to Dependants of Deceased Sailors and Soldiers of the Canadian Naval Forces and the Canadian Expeditionary Force, as effective on September 1, 1921.**

Rank or Rating of Member of Forces.	Rate per Annum.		
	Widow or Dependent Parents.	Child or Dependent Brother or Sister.	Orphan child or Orphan Brother or Sister.
	\$ cts.	\$ cts.	\$ cts.
All ratings below Petty Officer (Naval); Rank and file (Military)...	480 00 <sup>1</sup>	—	—
Bonus.	240 00 <sup>1</sup>	—	—
Chief Petty Officer and Petty Officer (Naval); Squad, Battery or Company Sergt.-Major and Q.M. Sergeant (Military); Sergt., including Staff-Sergt. and Colour-Sergt. (Military).....	510 00 <sup>1</sup>	—	—
Bonus.	210 00 <sup>1</sup>	—	—
Naval Cadet and Midshipman (Naval); Master Gunner not W.O. (Military); Regimental Sergt.-Major not W.O. (Military); Regi- mental Q.M. Sergeant (Military).....	620 00 <sup>1</sup>	—	—
Bonus.	100 00 <sup>1</sup>	—	—
Warrant Officer and Chief Warrant Officer (Naval); Warrant Officer (Military).....	680 00 <sup>1</sup>	—	—
Bonus.	40 00 <sup>1</sup>	—	—
Sub-Lieutenant (Naval); Lieutenant (Military).....	720 00 <sup>1</sup>	—	—
Lieutenant (Naval); Captain (Military).....	800 00 <sup>1</sup>	—	—
Lieutenant Commander (Naval); Major (Military).....	1,008 00 <sup>1</sup>	—	—
Commander and Captain under three years' seniority (Naval); Lieutenant-Colonel (Military).....	1,248 00 <sup>1</sup>	—	—
Captain (Naval); Colonel (Military).....	1,512 00 <sup>1</sup>	—	—
Commodore and higher ranks (Naval); Brigadier-General and higher ranks (Military).....	2,160 00 <sup>1</sup>	—	—
Additional pension for children or dependent brothers or sisters for above ranks.....	First.....	180 00 <sup>1</sup>	360 00 <sup>1</sup>
	Second.....	144 00 <sup>1</sup>	288 00 <sup>1</sup>
	Subsequent.	120 00 <sup>1</sup>	240 00 <sup>1</sup>

<sup>1</sup>Pensions awarded to parents or brothers and sisters may be less than these amounts in accordance with the provisions of this Act.

### 24.—Scale of Annual Pensions to Disabled Sailors and Soldiers of Force, as effective for years commencing September

PERCENTAGE OF DISABILITY AND AMOUNT

Rank or Rating of Member of Forces.	Rate per Annum.	Class 1 Total 100%	Class 2 99-95%.	Class 3 94-90%.	Class 4 89-85%.	Class 5 84-80%.	Class 6 79-75%.	Class 7 74-70%.	Class 8 69-65%
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
All Ratings below Petty Officer (Naval); Rank and File (Military).....	Pension....	600 00	570 00	540 00	510 00	480 00	450 00	420 00	390 00
	Bonus.....	300 00	285 00	270 00	255 00	240 00	225 00	210 00	195 00
Chief Petty Officer and Petty Officer (Naval); Squad, Battery or Company Sergt.-Major and Q.M. Sergeant (Military); Sergeant, including Staff Sergt. and Colour-Sergt. (Military).....	Pension....	637 50	605 63	573 75	541 88	510 00	478 13	446 25	414 38
	Bonus.....	262 50	249 37	236 25	223 12	210 00	196 87	183 75	170 62
Naval Cadet and Midshipman (Naval); Master Gunner not W.O. (Military); Regimental Sergt. Major not W.O. (Military); Regimental Q.M. Sergt. (Military).....	Pension....	775 00	736 25	697 50	658 75	620 00	581 25	542 50	503 75
	Bonus.....	125 00	118 75	112 50	106 25	100 00	92 75	87 50	81 25
Warrant Officer and Chief Warrant Officer (Naval); Warrant Officer (Military).....	Pension....	850 00	807 50	765 00	722 50	680 00	637 50	595 00	552 50
	Bonus.....	50 00	47 50	45 00	42 50	40 00	37 50	35 00	32 50
Sub-Lieutenant (Naval); Lieutenant (Military).....	Pension....	900 00	855 00	810 00	765 00	720 00	675 00	630 00	585 00
Lieutenant (Naval); Captain (Military).....	" ..	1,000 00	950 00	900 00	850 00	800 00	750 00	700 00	650 00
Lieutenant Commander (Naval); Major (Military).....	" ..	1,260 00	1,197 00	1,134 00	1,071 00	1,008 00	945 00	882 00	819 00
Commander and Captain under three years' seniority (Naval); Lieutenant Colonel (Military).....	" ..	1,560 00	1,482 00	1,404 00	1,326 00	1,248 00	1,170 00	1,092 00	1,014 00
Captain (Naval); Colonel (Military).....	" ..	1,890 00	1,795 50	1,701 00	1,606 50	1,512 00	1,417 50	1,323 00	1,228 50
Commodore and higher ranks (Naval); Brigadier-General and higher ranks (Military)....	" ..	2,700 00	2,565 00	2,430 00	2,295 00	2,160 00	2,025 00	1,890 00	1,755 00
Above Ranks.....	Additional pension for Married members of the Forces....	300 00	285 00	270 00	255 00	240 00	225 00	210 00	195 00
Additional pension for children for above ranks.....	First child..	180 00	171 00	162 00	153 00	144 00	135 00	126 00	117 00
	Second child....	144 00	138 00	132 00	126 00	120 00	114 00	108 00	102 00
	Subsequent children..	120 00	114 00	108 00	102 00	96 00	90 00	84 00	78 00

The bonus payments set forth in this Schedule shall be paid during the years commencing September 1, 1922 and 1923. Members of the forces permanently disabled to a less extent than five per cent shall be entitled to a final payment not exceeding \$100.

Members of the forces who are at the time of retirement or discharge, or who later become disabled to an extent of between five and fourteen per cent may elect to accept a final payment in lieu of the pensions set forth in this Schedule. The amount of such final payment in cases of disability between five and nine per cent shall not exceed three hundred dollars and in cases of disability between ten and fourteen per cent shall not exceed six hundred dollars and shall be determined in accordance with the extent of the disability and its probable duration. Members of the forces permanently disabled between ten and fourteen per

**the Canadian Naval Forces and the Canadian Expeditionary  
1, 1921, 1922 and 1923, under the Pension Act.**

**OF PENSIONS AND ALLOWANCES.**

Class 9 64-60%	Class 10 59-55%	Class 11 54-50%	Class 12 49-45%	Class 13 44-40%	Class 14 39-35%	Class 15 34-30%	Class 16 29-25%	Class 17 24-20%	Class 18 19-15%	Class 19 14-10%	Class 20 9-5%
\$ cts. 360 00	\$ cts. 330 00	\$ cts. 300 00	\$ cts. 270 00	\$ cts. 240 00	\$ cts. 210 00	\$ cts. 180 00	\$ cts. 150 00	\$ cts. 120 00	\$ cts. 90 00	\$ cts. 60 00	\$ cts. 30 00
180 00	165 00	150 00	135 00	120 00	105 00	90 00	75 00	60 00	45 00	30 00	15 00
382 50	350 63	318 75	286 88	255 00	223 13	191 25	159 38	127 50	95 63	63 75	31 88
157 50	144 37	131 25	118 12	105 00	91 87	78 75	65 62	52 50	39 37	26 25	13 12
465 00	426 25	387 50	348 75	310 00	271 25	232 50	193 75	155 00	116 25	77 50	38 75
75 00	68 75	62 50	56 25	50 00	43 75	37 50	31 25	25 00	18 75	12 50	6 25
510 00	467 50	425 00	382 50	340 00	297 50	255 00	212 50	170 00	127 50	85 00	42 50
30 00	27 50	25 00	22 50	20 00	17 50	15 00	12 50	10 00	7 50	5 00	2 50
540 00	495 00	450 00	405 00	360 00	315 00	270 00	225 00	180 00	135 00	90 00	45 00
600 00	550 00	500 00	450 00	400 00	350 00	300 00	250 00	200 00	150 00	100 00	50 00
756 00	693 00	630 00	567 00	504 00	441 00	378 00	315 00	252 00	189 00	126 00	63 00
936 00	858 00	780 00	702 00	624 00	546 00	468 00	390 00	312 00	234 00	156 00	78 00
1,184 00	1,039 50	945 00	850 50	756 00	661 50	567 00	472 50	378 00	283 50	189 00	94 50
1,620 00	1,485 00	1,350 00	1,215 00	1,080 00	945 00	810 00	675 00	540 00	405 00	270 00	135 00
180 00	165 00	150 00	135 00	120 00	105 00	90 00	75 00	60 00	45 00	30 00	15 00
108 00	99 00	90 00	81 00	72 00	63 00	54 00	45 00	36 00	27 00	18 00	9 00
96 00	90 00	84 00	78 00	72 00	63 00	54 00	45 00	36 00	27 00	18 00	9 00
72 00	66 00	60 00	54 00	48 00	42 00	36 00	30 00	24 00	18 00	12 00	6 00

cent shall receive six hundred dollars. Members of the forces permanently disabled between five and nine per cent shall receive three hundred dollars. If an election has been made to accept a final payment such election is final unless the disability of the member of the forces concerned becomes greater in extent, in which case the pension shall be adjusted for the past period in accordance with the extent of the disability and the amount paid as a final payment shall be deducted. If a married pensioner desires to elect to accept a final payment the consent of his wife must be secured. All payments of pension made subsequent to the time at which an award of fourteen per cent or under is made shall be deducted from the amount of the final payment.



## 25. Number of Pensions in Force on Dec. 31, 1921, and the Annual Liability incurred thereon.

### PENSIONS TO DEPENDANTS OF DECEASED SOLDIERS.

Classification.	No.	Yearly Liability.
Widows.....	9,595	7,005,057
Mothers.....	6,449	2,528,577
Fathers.....	2,010	567,829
Grand Parents.....	46	18,023
Children.....	16,953	2,592,389
Orphans.....	1,003	312,941
Brothers and Sisters.....	177	28,668
Orphan Brothers and Sisters.....	12	3,602
	36,245	13,057,086

### PENSIONS FOR DISABILITIES.

Classification.	Pen-sioners.	Wives.	Children.	Parents.	Mothers.	Fathers.	Liability.
							\$
Privates.....	40,187	20,739	28,818	8	162	8	14,820,738
Sergeants.....	4,195	2,598	3,876	2	—	1	1,431,065
R. S. M.'s.....	137	93	139	—	—	1	54,894
W. O.'s.....	69	59	94	—	—	—	31,130
Lieutenants.....	1,547	689	707	1	—	1	449,074
Captains.....	739	437	556	—	—	—	292,251
Majors.....	327	208	525	—	—	—	141,712
Lt. Colonels.....	109	64	87	—	—	—	57,230
Colonels.....	9	5	9	—	—	—	8,225
Br. Generals.....	8	3	3	—	—	—	8,328
	47,327	24,895	34,814	11	162	11	17,294,637

372 Special Allowances for attendance..... 128,628

Total Annual Liability for Disability Pensions..... 17,423,265

Total Annual Liability for Pensions to Dependants of Deceased Soldiers..... 13,057,086

**Grand Total Annual Liability..... 30,480,351**

**Returned Soldiers' Life Insurance.**—Under the Returned Soldiers' Insurance Act of 1920, (10–11 Geo. V, c. 54), a system of life insurance at very favourable rates was established for returned soldiers, whose lives might not be considered as insurable by life insurance companies. The general features of the scheme were described on pages 38–40 of the 1920 Year Book, to which the reader is referred. Under 12–13 Geo. V, c. 42, the limit of time during which applications may be received has been extended to September 1, 1923. Applicants with or without pensionable disability who are so seriously ill that they have no expectation of life, and who have dependants entitled to become beneficiaries, may be insured up to Jan. 1, 1923. Up to Dec. 31, 1921, the number of applications received and approved was 7,980, the premiums received were \$352,769, and the total sum assured was \$19,589,500; the total death claims to that date were 180, aggregating \$645,000.

## THE SOLDIER SETTLEMENT BOARD.

**The Soldier Settlement Board.**—The Soldier Settlement Board was organized under the authority of the Soldier Settlement Act, 1917, (7-8 Geo. V, c. 21), and empowered to assist eligible returned soldiers to settle upon the land. By the Soldier Settlement Act, 1919, (9-10 Geo. V, c. 71), the scope of the work was extended and the Board was authorized to purchase for returned men agricultural lands in any province. The earlier proceedings of the Soldier Settlement Board have been described on pages 29-35 of the Year Book for 1920, to which the reader is referred.

The soldier settlers who had taken up land under the Soldier Settlement Board with money borrowed from the Government, not being well established, suffered even more than other agriculturists from the great decline in agricultural prices indicated by the table on page 272 and its accompanying diagram. Consequently, the Soldier Settlement Act of 1919 was amended by chapter 46 of the statutes of 1922.

While the Act of 1919 and its amendments of 1920 called for the repayment of stock and equipment loans on unimproved property in 6 years and on improved property in 4 years, and of loans for land purchase, removal of encumbrances and permanent improvements in 25 years, the recent amendments make all loans for whatever purpose run for 25 years. Settlers who were on the land prior to October 1, 1921, will have all their indebtedness to the Board up to April 1, 1922, consolidated into one loan, and interest will be added to October 1, 1922. All such settlers have been given an exemption of interest for periods of from two to four years from October 1, 1922, depending on the year they were established. Those settled before October 1, 1919, will receive four years' exemption, that is, to October 1, 1926. During the interest exemption period repayments will be on principal only, amounting each standard date to one twenty-fifth of the consolidated indebtedness. After this period, interest and principal are amortized and are repayable in equal annual instalments. Three years' interest exemption is granted to the 1920 settler and two years' to the 1921 settler.

Since the compilation of the statistics given on page 31 of the 1920 Year Book, a considerable number of loans have been made. Up to Mar. 31, 1922, 63,323 returned men had applied to the Board for loans and 45,180 had been accepted as qualified. Loans had been granted to 21,394 applicants, distributed by provinces as follows:

	Number of Loans.	Amount in \$
Prince Edward Island.....	336	924,438
Nova Scotia.....	400	1,365,569
New Brunswick.....	568	1,757,388
Quebec.....	416	2,092,482
Ontario.....	1,628	7,001,765
Manitoba.....	3,378	14,495,488
Saskatchewan.....	5,336	21,586,288
Alberta.....	6,260	25,580,812
British Columbia.....	3,072	13,724,767
Canada.....	21,394	88,528,997

Loans were granted for the following purposes:	\$
To purchase land.....	48,838,781
To remove encumbrances on land owned by settler.....	2,081,977
To erect permanent improvements.....	10,306,663
To purchase stock and equipment.....	27,301,576
	<hr/> 88,528,997 <hr/>

In addition to those who have received money advances from the Government, 6,073 men who have taken up soldier grants and are eligible for loans have not yet taken advantage of this privilege.

Since the commencement of the Board's obligation more than 600,000 acres of raw land has been brought under cultivation by soldier settlers. In 1921 settlers brought 189,664 acres of new land under cultivation and at the end of the fiscal year the total area of land occupied by returned men under the Act was 5,238,449 acres.

The estimated value of crops raised by soldier settlers in 1921, a lean year in agriculture generally, was \$12,765,132. Livestock owned by settlers on March 31, 1922, was valued at \$13,829,601. Out of the amounts advanced by the Finance Department for loans to soldier settlers there had been returned \$11,885,781, so that on Mar. 31, 1922, the outstanding liability was about \$76,000,000.

#### DOMINION DEPARTMENT OF HEALTH.

The activities of the Department of Health of the Dominion Government come under the following ten headings: Quarantine Service, Immigration and Medical Service, Food and Drug Laboratories, Opium and Narcotic Drugs, Proprietary or Patent Medicines, Marine Hospitals Service, Venereal Disease Control, Child Welfare, Housing, Medical Research.

*Quarantine Service.*—Eight quarantine stations were kept in operation during the year, namely, at Charlottetown, P.E.I., Chat-ham, N.B., Halifax, N.S., Louisburg, N.S., North Sydney, N.S., Quebec, P.Q., St. John, N.B., and Victoria, B.C. The number of vessels that reported at the stations above mentioned was 1,703 and the number of examinations made of individuals was 322,238.

There were 609 admissions to the quarantine hospitals, 247 of this number being patients and the balance "contacts," or persons who accompanied the sick; while the total number of days in hospital amounted to 7,065 for all classes of admission. There were twenty-two different classifications of disease, of which chickenpox with 11, measles with 108, mumps with 13, pediculosis with 28, and scarlet fever with 11 cases, were the largest contributors. There was only one case of smallpox, and but seven cases of influenza.

The leper station (Tracadie lazaretto) at Tracadie, N.B., had at the close of the year ten patients under treatment. Five of this number were female and five male. It is interesting to note that this is the smallest number since the lazaretto was opened. No new cases were admitted, but three inmates died during the period; two males, aged 67 and 64, and the third a female aged 54. The leper

station (lazaretto) at D'Arcy Island, B.C., had five inmates, all of them being Chinese. One patient was released and one new case was admitted.

*Immigration Medical Service.*—For the purpose of detecting physical or mental defects, 63,990 immigrant passengers were examined, and of this number 736 were found to be of the prohibited classes, and a further number of 358 were found upon arrival to require medical or surgical treatment. In addition to the 736 who were found to come within the prohibited classes, 722 were found to have minor defects, which data were entered in the individual cards for future reference.

*Food and Drug Laboratory.*—During the year 225 prosecutions were entered for violation of the Food and Drugs Act, 203 of these having been completed and 22 being in progress. The list of articles which go to make up the above number of prosecutions is wide in range, and of the 225 cases but one was dismissed by the court. In the examination and analysis of foods, beverages and medicinal preparations, approximately 2,300 items came under notice because of complaints received respecting adulteration or to see that they conformed with the Act.

*Opium and Narcotic Drugs.*—During the year 389 licenses were issued covering the following four classifications: Import Licenses, Export Licenses, Wholesale Druggists' Licenses and Retail Druggists' Licenses to manufacture, the total fees received for all licenses issued being \$3,850. Statistics of narcotic drugs imported show marked reductions in importation in the fiscal year ended Mar. 31, 1922, as compared with 1919, before the Department of Health was created. The following examples may be given, 1919 figures being in parentheses:—1922, cocaine 2,952 oz. (12,333 oz.), morphine, 8,774 oz. (30,087 oz.), crude opium, 1,700 lbs. (34,263 lbs.).

Close supervision is maintained on all exports and imports of narcotics, and the licensing system enables the department to know at all times of the amount of these drugs received by every druggist, veterinary surgeon, dentist or physician in Canada. By this system it is possible for the Department to check up the disposition of these drugs to make absolutely certain that the use being made of them does not contravene the Act. While the illicit traffic is much more difficult a problem to handle, no fewer than 835 convictions were obtained during the year. Figures are not available to show the number of convictions other than by the Royal Canadian Mounted Police for infractions of the Act for the fiscal year, but for the judicial year ended September 30, 1921, there were in all 1,864 prosecutions, including the 669 Dominion cases.

*Proprietary or Patent Medicines.*—During the year 4,100 preparations were covered by licenses authorizing their sale in Canada, and registration numbers were allotted accordingly. Periodically samples of various medicines are obtained in the open market and are sent to the laboratory for analysis, for the purpose of confirming the



ingredients contained in each. A large amount of goods was seized and confiscated because of non-conformity with the Act. Careful perusal of the newspapers and other advertising is made to obtain copies of illicit advertising. The fundamental principle of the Act is to require the manufacturer of proprietary medicines to place his preparation on the market so that the ordinary layman may understand what he is taking. Nearly all the druggists in Canada are co-operating with the Department in the operation of this law.

*Marine Hospital Service.*—During the year two marine hospitals were operated. One was at Sydney, N.S., and the other at Louisburg, N.S., while arrangements were made whereby sick or distressed mariners would be treated at 49 other hospitals throughout Canada, with the exception of the province of Ontario, where the Act does not apply. During this period 2,035 sick or injured mariners were treated.

*Venereal Disease Control.*—The sum of \$200,000 was granted by the Dominion Government for the work of venereal disease control, and of this sum \$10,000 was granted to the Canadian National Council for Combating Venereal Disease; \$10,000 was retained for current expenses, and the balance was divided among the provinces as follows: New Brunswick (8), \$7,518; Nova Scotia (5), \$10,574; Alberta (4), \$11,980; Manitoba (4), \$12,611; British Columbia (2), \$14,628; Saskatchewan (8), \$15,361; Quebec (8), \$47,389; Ontario (13), \$57,474. Free hospital accommodation and free treatment in institutions has been provided, as well as laboratories operating in all the provinces. In addition to the publications issued by the Department of Health of the Dominion Government (15 in number, obtainable in English and French, the circulation of which amounted to over half a million copies), the provinces have issued a large amount of educational literature on the subject.

*Child Welfare.*—In addition to the co-operative work with the different provinces, this division has been able to supplement the work carried on by other government departments. In the educational programme of this division, pamphlets, posters, cards and a moving picture film have formed a large part of the work. Over 150,000 copies of the "Canadian Mother's Book" have been distributed. The "Little Blue Books, Home Series," 14 in number, were so much in demand that it was found necessary to issue a second edition of the series. The first edition of 10,000 sets was used up in less than six months. All publications from this division are issued in English and French, and the total number of child welfare publications issued during the period amounted to 365,503. Up to November 30, 1921, no less than 55,000 copies of the "Card to Baby's Mother" had been sent to the district registrars. Some 50,000 sets of rhymed posters were printed on cards and distributed to fall fairs, baby health demonstrations and similar meetings held in connection with the child welfare movement.

*Housing.*—The total amount expended to the end of the fiscal year was \$17,108,120, distributed amongst the following six provinces, viz.: Manitoba, New Brunswick, Ontario, British Columbia, Quebec and Nova Scotia. The total number of houses erected, exclusive of New Brunswick, was 3,874; houses under construction and planned to be built, 179; while 175 municipalities were co-operating. With the exception of the province of Alberta, all the provinces have enacted Housing Acts.

*Medical Research.*—The obtaining and installing of laboratory equipment and supplies has progressed so far as to allow of the commencement of research work which takes the form of the examination for potency of all curative sera and vaccines placed upon the Canadian market; standardization control of preparations of such drugs as ergot, digitalis, strophanthus, suprarenal glands and of the pituitary body, together with bacteriological examinations of raw and canned foods, feces, milk, water, etc. Pathological work will be largely confined to co-ordination of bacteriological requirements, although all types of work demanding attention will be undertaken.

#### JUDICIAL AND PENITENTIARY STATISTICS.

The collection and publication of Criminal Statistics was first authorized by an Act of 1876 (39 Vict., c. 13), and the results have been published upon a comparable basis in an annual report from 1880 to the present time, being now collected and published by the Dominion Bureau of Statistics under the Statistics Act (8-9 Geo. V., c. 43), which provides for the receipt of an annual return by the Bureau from every court or tribunal administering criminal justice. The statistics as published show for each judicial district (148 in number) the offences that have been committed, analysed to indicate the nature of the offence, the age, sex, occupation and social condition, birthplace, etc., of the convicted, and the sentences imposed. The Act also provides for the collection of the statistics of penitentiaries, prisons, reformatories and jails as complementary to the preceding. The statistics relate to years ending September 30, the last report being for 1920. These statistics are divided into two classes of (1) indictable and (2) non-indictable offences, the former comprising all cases tried by police or other magistrates and the latter all cases of minor importance disposed of by justices of the peace under the Summary Convictions Act. A historical table giving the totals for different classes of indictable offences and the grand total for non-indictable offences from 1876 to 1920 is here published (Table 26). In the consideration of this table it should be remembered that while the criminal code undergoes little change over periods of time, the figures of summary convictions depend very much upon the changes in the customs of the people and are apt to increase with the increasing urbanization of the population. The most significant column of Table 26 is the figure of criminal offences per 100,000 of population.

**Indictable Offences.**—Table 27 shows by provinces in respect of indictable offences the number of charges and convictions and the percentages of acquittals for the years 1918, 1919 and 1920. There were 23,213 charges and 18,443 convictions for indictable offences throughout Canada during the year ended September 30, 1920, as compared with 23,021 charges and 18,396 convictions in 1919, an increase of 191 or 0·83 p.c., for charges and of 47 or 0·25 p.c., for convictions over the previous year.

**Summary Convictions.**—The number of summary convictions—that is, the total number of convictions for all offences less the number of convictions for indictable offences—in 1920 was 144,265, as compared with 111,623 in 1919. This represents an increase of 32,642 or 29·24 p.c.

**Death Sentences.**—During the year ended September 30, 1920, there were 26 persons sentenced to death for murder as compared with 28 in 1919. The number of commutations of death sentences in 1920 was 13 to imprisonment for life and 1 for fifteen years, compared with 6 to imprisonment for life and 1 for twelve years in 1919.

**Police Statistics.**—In the annual report of Criminal Statistics for the year ended Sept. 30, 1920, are given for the first time statistics of the total number of offences “known to the police”, supplementing the previous figures of cases dealt with by the courts. It is clear that an increase or decrease in the number of offences committed cannot be accurately indicated by the number of actual prosecutions, and with a view to collecting as complete data as possible, detailed information relative to police activities has been obtained for the calendar year 1920 from 88 of the largest cities and towns in the Dominion.

The number of police in the 88 cities and towns making returns was 3,614. The number of offences reported or known to the police during the year was 183,126; 151,468 persons were arrested or summoned to stand trial, the perpetrators of over 31,000 offences remaining undiscovered. The number of thefts known to have been committed was 22,820, whereas the number of charges for theft total 10,575, and the convictions 8,678. There were 5,655 burglaries and house and shop breakings, the charges and convictions being 2,317 and 2,073 respectively. Highway robberies to the number of 663 were reported, yet the number of all cases of robbery dealt with by the courts was but 332, with 237 convictions. Automobiles numbering 3,682 of a value of \$4,762,043 were reported stolen, of which 3,534 were recovered. The number of bicycles reported stolen was 4,814 and of those recovered 2,624. In addition the police found 2,325 bicycles which had not been reported stolen, and found claimants for 2,151 of these. The value of all other articles reported stolen was \$2,325,755, and of this amount \$1,336,027 was recovered. Photographs of prisoners taken totalled 5,217, finger prints, 12,499 and identifications established, 1,724. Street accidents reported numbered 13,766. Shelter was given to 22,927 persons and 5,212 children were found and returned to their homes.

**26.—Convictions by Groups of Criminal Offences, and Total Convictions for Minor Offences, 1876-1920, with Proportion to Population.**

Year.	Criminal Offences.							Minor Offences.			Total Criminal and Minor Offences.	
	Offences against			Other felonies and misdemeanours.	Totals of criminal offences.			Total Minor Offences.				
	the person.	property with violence.	property without violence.		No.	No.	p.c. of all offences	per 100,000 pop.	No.	p.c. of all offences		per 100,000 pop.
1876...	4,959	201	2,870	121	8,151	28.9	206	20,064	71.1	508	28,215	
1877...	5,253	229	3,316	114	8,912	29.4	222	21,388	70.6	533	30,300	
1878...	5,376	222	3,612	129	9,339	28.3	229	23,666	71.7	580	33,005	
1879...	4,815	238	3,043	75	8,168	28.4	197	20,568	71.6	496	28,736	
1880...	5,694	176	3,018	202	9,090	32.2	215	19,119	67.8	454	28,209	
1881...	4,353	144	2,593	288	7,378	25.2	170	21,847	74.8	504	29,225	
1882...	4,667	173	2,845	106	7,791	24.9	178	23,514	75.1	536	31,305	
1883...	4,868	132	2,587	128	7,715	22.9	174	25,857	77.1	583	33,572	
1884...	4,288	228	3,547	167	8,230	27.6	183	21,563	72.4	481	29,793	
1885...	5,057	222	3,157	289	8,725	25.6	192	25,317	74.4	558	34,042	
1886...	5,202	255	2,943	224	8,624	25.2	188	25,581	74.8	557	34,205	
1887...	4,902	208	2,519	224	7,873	22.7	170	26,772	77.3	577	34,645	
1888...	4,790	225	3,442	162	8,619	22.8	184	29,173	77.2	622	37,792	
1889...	5,284	283	3,456	164	9,187	23.8	194	29,421	76.2	621	38,608	
1890...	5,093	276	3,267	164	8,800	22.7	184	29,906	77.3	624	38,706	
1891...	4,788	283	3,369	160	8,600	22.9	178	29,017	77.1	599	37,617	
1892...	4,903	251	3,232	173	8,559	24.3	175	26,734	75.7	547	35,293	
1893...	4,689	362	3,574	181	8,806	24.7	178	26,847	75.3	544	35,653	
1894...	4,599	450	4,155	200	9,404	26.0	189	26,761	74.0	537	36,165	
1895...	4,652	462	4,199	295	9,608	25.6	191	27,977	74.4	556	37,585	
1896...	4,544	408	4,104	301	9,357	25.1	184	27,921	74.9	549	37,792	
1897...	4,418	475	4,431	409	9,733	25.6	189	28,245	74.4	550	37,792	
1898...	4,594	540	4,594	335	10,063	26.3	193	28,143	74.7	514	38,634	
1899...	4,227	444	4,541	339	9,551	24.7	181	29,159	75.3	554	38,792	
1900...	4,598	413	4,571	411	9,993	24.0	188	31,661	76.0	595	41,655	
1901...	4,698	451	4,441	384	9,974	23.7	184	32,174	76.3	596	42,148	
1902...	4,773	413	4,541	363	10,090	23.1	182	33,446	76.9	605	43,536	
1903...	5,480	543	4,944	505	11,472	22.8	202	38,911	77.2	686	50,383	
1904...	5,919	552	5,295	528	12,294	22.4	211	42,652	77.6	732	54,946	
1905...	5,694	656	5,711	812	12,873	20.6	215	49,686	79.4	829	62,559	
1906...	6,215	645	6,425	1,078	14,363	20.3	233	56,540	79.7	916	70,903	
1907...	6,651	681	6,907	807	15,046	19.0	239	64,124	81.0	1,017	79,170	
1908...	7,379	893	7,973	1,069	17,314	19.5	266	71,320	80.5	1,099	88,634	
1909...	6,586	848	7,771	1,332	16,537	18.4	247	73,415	81.6	1,096	89,952	
1910...	7,793	943	8,191	1,131	18,058	17.5	268	84,845	82.5	1,227	102,903	
1911...	8,352	977	9,024	1,194	19,547	17.3	273	93,713	82.7	1,309	113,260	
1912...	9,371	1,195	10,626	1,540	22,732	15.5	309	123,795	84.5	1,686	146,527	
1913...	11,444	1,472	12,721	1,724	27,361	15.8	363	145,777	84.2	1,936	173,128	
1914...	12,136	1,810	14,645	1,952	30,543	16.7	395	152,492	83.3	1,974	183,035	
1915...	10,664	2,234	14,269	1,525	28,692	18.7	362	124,363	81.3	1,569	153,055	
1916...	9,327	1,478	11,018	1,459	23,282	18.8	286	100,509	81.2	1,235	123,791	
1917...	6,852	1,321	9,886	1,271	19,330	16.9	231	94,681	83.1	1,132	114,011	
1918...	7,292	2,049	10,743	1,390	21,474	17.4	250	101,795	82.6	1,184	123,268	
1919...	7,731	2,606	11,508	1,656	23,501	18.1	266	106,519	81.9	1,206	130,019	
1920...	8,281	2,310	11,634	2,059	24,284	14.9	269	138,424	85.1	1,533	162,708	



**27. — Charges, Convictions and Percentages of Acquittals for Indictable Offences, by Provinces, 1918, 1919 and 1920.**

Provinces.	1918.			1919.			1920.		
	Charges	Convictions.	Acquittals.	Charges	Convictions.	Acquittals.	Charges	Convictions.	Acquittals.
	No.	No.	p.c.	No.	No.	p.c.	No.	No.	p.c.
Prince Edward Island.....	42	37	11.90	32	31	3.12	29	19	34.52
Nova Scotia.....	990	717	27.58	1,059	767	27.67	952	713	25.10
New Brunswick.....	387	334	13.69	437	333	23.80	494	434	12.15
Quebec.....	4,631	3,747	19.09	4,823	3,920	18.74	4,228	3,288	22.23
Ontario.....	10,278	8,313	19.12	10,647	8,628	18.96	10,255	8,414	17.95
Manitoba.....	1,617	1,364	15.65	1,619	1,386	14.39	1,765	1,423	19.43
Saskatchewan.....	1,412	1,099	22.17	1,385	1,135	18.05	1,807	1,468	18.76
Alberta.....	1,237	889	28.13	1,480	1,040	29.73	1,671	1,240	25.78
British Columbia.....	1,138	859	24.52	1,532	1,151	24.87	2,004	1,438	28.24
Yukon.....	15	11	26.66	7	5	18.57	8	6	25.00
<b>Canada.....</b>	<b>21,747</b>	<b>17,370</b>	<b>20.13</b>	<b>23,021</b>	<b>18,396</b>	<b>20.09</b>	<b>23,213</b>	<b>18,443</b>	<b>20.55</b>

**28. Indictable Offences by Classes during the Years ended September 30, 1919 and 1920.**

By Classes and Offences.	1919.		1920.	
	Number of Charges.	Number of Convictions	Number of Charges.	Number of Convictions.
<b>CLASS I.—OFFENCES AGAINST THE PERSON.</b>				
Murder.....	79	28	57	26
Murder, attempt to commit.....	34	22	36	19
Manslaughter.....	62	32	84	43
Abortion and concealing birth of infants.....	10	8	20	11
Rape and other crimes against decency.....	516	311	532	298
Procuracion.....	39	23	40	27
Bigamy.....	92	71	88	71
Shooting, stabbing and wounding.....	182	109	282	183
Assault on females.....	29	22	97	70
Aggravated assault.....	711	471	698	455
Assault on police officer.....	554	503	628	578
Assault and battery.....	1,109	852	1,205	934
Assault to support family.....	114	85	149	110
Various other offences against the person.....	153	77	113	76
<b>Totals.....</b>	<b>3,684</b>	<b>2,614</b>	<b>4,029</b>	<b>2,901</b>
<b>CLASS II.—OFFENCES AGAINST PROPERTY WITH VIOLENCE.</b>				
Burglary, house, warehouse and shopbreaking.....	2,717	2,420	2,317	2,073
Robbery and demanding with menaces.....	348	164	366	227
Highway robbery.....	27	22	26	10
<b>Totals.....</b>	<b>3,092</b>	<b>2,606</b>	<b>2,709</b>	<b>2,310</b>
<b>CLASS III.—OFFENCES AGAINST PROPERTY WITHOUT VIOLENCE.</b>				
Bringing stolen goods into Canada.....	12	12	1	1
Embezzlement.....	11	7	8	4
False pretences.....	579	406	693	473
Feloniously receiving stolen goods.....	536	373	652	430
Fraud and conspiracy to defraud.....	499	366	576	436
Horse, cattle and sheep stealing.....	90	68	73	51
Theft.....	10,613	8,651	10,478	8,605
Theft of mail.....	32	28	24	22
<b>Totals.....</b>	<b>12,372</b>	<b>9,911</b>	<b>12,505</b>	<b>10,022</b>
<b>CLASS IV.—MALICIOUS OFFENCES AGAINST PROPERTY.</b>				
Arson.....	73	43	78	34
Malicious injury to horses, cattle and other wilful damage to property.....	450	327	415	294
<b>Totals.....</b>	<b>523</b>	<b>370</b>	<b>493</b>	<b>328</b>

**28.—Indictable Offences by Classes during the Years ended September 30, 1919 and 1920—concluded.**

By Classes and Offences.	1919.		1920.	
	Number of Charges.	Number of Convictions.	Number of Charges.	Number of Convictions.
<b>CLASS V.—FORGERY AND OTHER OFFENCES AGAINST THE CURRENCY.</b>				
Offences against currency.....	—	—	14	11
Forgery and uttering forged documents.....	466	377	559	419
<b>Totals.....</b>	<b>466</b>	<b>377</b>	<b>573</b>	<b>430</b>
<b>CLASS VI.—OTHER OFFENCES NOT INCLUDED IN THE FOREGOING CLASSES.</b>				
Attempt to commit suicide.....	28	20	42	33
Carrying unlawful weapons.....	98	91	156	144
Criminal negligence.....	1	1	67	50
Conspiracy.....	21	6	101	58
Driving automobile while drunk.....	1	1	48	48
Forcible entry.....	12	2	4	3
Indecent exposure and other offences against public morals.....	153	140	187	170
Intimidation.....	1	1	32	19
Keeping bawdy houses and inmates thereof.....	1,340	1,239	927	823
Offences against gambling and lottery acts.....	332	296	361	303
Offences against revenue law.....	312	292	122	114
Illicit stills.....	—	—	251	239
Perjury and subornation of perjury.....	94	41	106	34
Prison breach and escape from prison.....	177	169	155	147
Riot and affray.....	75	65	101	94
Sedition.....	37	19	12	8
Sodomy and bestiality.....	83	54	104	85
Various other misdemeanours.....	122	84	128	80
<b>Totals.....</b>	<b>2,884</b>	<b>2,518</b>	<b>2,904</b>	<b>2,452</b>
<b>Totals for Canada.....</b>	<b>23,021</b>	<b>18,396</b>	<b>23,213</b>	<b>18,443</b>

<sup>1</sup>Included under "various other misdemeanours."

**29.—Convictions and Sentences for all Offences, by Provinces, 1914-1920.**

Provinces.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<b>Canada—</b>	No.	No.	No.	No.	No.	No.	No.
Convictions.....	183,035	153,055	123,791	114,011	123,269	130,019	162,708
Sentences—							
Penitentiary.....	1,216	1,322	982	686	890	1,214	1,125
Gaal or fine.....	141,807	115,150	97,847	92,402	99,899	105,747	135,288
Reformatory.....	592	517	568	584	678	678	615
Death.....	27	34	21	15	20	28	26
Other sentences.....	39,393	36,032	24,373	20,324	21,782	22,352	25,654
<b>Prince Edward Island—</b>							
Convictions.....	523	362	419	356	246	267	359
Sentences—							
Penitentiary.....	—	8	3	5	2	2	1
Gaal or fine.....	504	350	402	338	198	240	342
Reformatory.....	—	—	—	2	7	6	—
Death.....	—	—	1	—	—	—	—
Other sentences.....	19	4	13	11	39	19	16
<b>Nova Scotia—</b>							
Convictions.....	7,379	6,724	6,568	5,282	5,511	6,300	6,503
Sentences—							
Penitentiary.....	70	93	50	45	105	108	122
Gaal or fine.....	6,769	5,963	5,899	4,533	4,682	5,471	5,818
Reformatory.....	46	55	42	49	47	44	38
Death.....	3	2	2	2	2	—	—
Other sentences.....	491	611	575	653	675	677	525
<b>New Brunswick—</b>							
Convictions.....	3,101	3,111	2,960	2,896	1,945	2,780	3,839
Sentences—							
Penitentiary.....	24	33	40	25	17	53	77
Gaal or fine.....	2,935	2,834	2,696	2,598	1,688	2,477	3,531
Reformatory.....	11	24	15	27	16	21	19
Death.....	—	—	—	—	—	1	—
Other sentences.....	131	220	209	246	224	228	212

## 23.—Convictions and Sentences for all Offences, by Provinces, 1914-1920—concluded.

Provinces.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
	No.	No.	No.	No.	No.	No.	No.
<b>Quebec—</b>							
Convictions.....	34,149	27,205	24,591	25,936	29,121	34,801	44,089
Sentences—							
Penitentiary.....	226	273	233	185	192	355	258
Gaol or fine.....	26,112	20,021	19,154	20,205	23,321	28,135	36,835
Reformatory.....	139	141	133	155	152	185	241
Death.....	2	5	1	2	4	7	7
Other sentences.....	7,670	6,765	5,070	5,389	5,542	6,119	6,748
<b>Ontario—</b>							
Convictions.....	65,086	58,876	49,620	49,579	54,761	53,215	63,463
Sentences—							
Penitentiary.....	355	409	287	216	343	389	404
Gaol or fine.....	48,763	41,303	35,618	39,366	42,745	41,211	49,677
Reformatory.....	242	234	266	289	352	323	252
Death.....	4	7	4	4	4	8	11
Other sentences.....	16,442	16,923	13,445	9,704	11,317	11,284	13,119
<b>Manitoba—</b>							
Convictions.....	16,334	12,843	9,052	8,155	8,662	9,514	12,516
Sentences—							
Penitentiary.....	73	129	38	55	59	87	76
Gaol or fine.....	13,302	10,277	7,234	6,626	6,538	7,387	9,949
Reformatory.....	106	33	85	31	59	64	39
Death.....	2	6	2	4	5	—	1
Other sentences.....	2,851	2,398	1,693	1,439	2,001	1,976	2,451
<b>Saskatchewan—</b>							
Convictions.....	13,782	11,672	11,016	7,072	7,635	7,315	7,991
Sentences—							
Penitentiary.....	107	60	62	36	64	63	40
Gaol or fine.....	12,184	10,586	10,141	6,533	7,010	6,636	7,251
Reformatory.....	8	3	2	—	5	—	—
Death.....	4	1	2	—	3	8	4
Other sentences.....	1,479	1,022	809	503	553	608	696
<b>Alberta—</b>							
Convictions.....	19,043	14,419	11,426	6,627	7,633	7,001	8,459
Sentences—							
Penitentiary.....	185	157	138	56	65	76	67
Gaol or fine.....	16,271	12,558	10,307	6,124	7,206	6,401	7,756
Reformatory.....	4	4	4	1	2	1	4
Death.....	4	2	4	1	1	3	3
Other sentences.....	2,579	1,698	973	445	359	520	629
<b>British Columbia—</b>							
Convictions.....	22,694	17,673	7,963	8,002	7,680	8,789	15,434
Sentences—							
Penitentiary.....	176	160	129	57	43	81	80
Gaol or fine.....	14,794	11,136	6,277	6,004	6,536	7,768	14,084
Reformatory.....	36	23	21	30	38	34	22
Death.....	7	10	4	1	1	1	—
Other sentences.....	7,681	6,344	1,532	1,910	1,062	905	1,243
<b>Yukon Territory—</b>							
Convictions.....	224	170	176	106	75	37	55
Sentences—							
Penitentiary.....	—	—	2	6	—	—	—
Gaol or fine.....	173	122	119	75	66	21	45
Reformatory.....	—	—	—	—	—	—	—
Death.....	1	1	1	1	—	—	—
Other sentences.....	50	47	54	24	9	16	10
<b>The Territories—</b>							
Convictions.....	—	—	—	—	—	—	—
Sentences—							
Penitentiary.....	—	—	—	—	—	—	—
Gaol or fine.....	—	—	—	—	—	—	—
Reformatory.....	—	—	—	—	—	—	—
Death.....	—	—	—	—	—	—	—
Other sentences.....	—	—	—	—	1	—	—

**Juvenile Delinquents.**—In Canada, as in other countries, the number of juvenile delinquents coming before the courts has increased very considerably in recent years. In 1920, 3,355 persons under 16 years of age were convicted of indictable offences, as compared with an annual average of 972 in the three years 1901 to 1903—an increase out of all proportion to the increase in population. Alarming conclusions have been based upon these and similar statistics of other countries, but it may be that the increase is due rather to increasing urbanization and the better enforcement of the laws than to any real lowering of the moral standards of the young. Of the 3,355 convictions in 1920, 2,211 were for theft and 801 for burglary, house and shop breaking. Of those convicted, 2,518 were let off with a warning, bound to keep the peace or allowed to go under suspended sentence.

**30. —Juvenile Criminals convicted of Indictable Offences by Classes of Offence, 1920, with the total and yearly average for the period 1885-1920.**

Classes of Offence.	Under 16 years.		16 years and under 21.		Totals.	
	M.	F.	M.	F.	M.	F.
1920.	No.	No.	No.	No.	No.	No.
I. Offences against the person.....	81	6	176	21	267	27
II. Offences against property with violence.....	804	2	769	2	1,573	4
III. Offences against property without violence.....	2,161	102	1,882	167	4,043	269
IV. Malicious offences against property.....	124	2	42	—	166	2
V. Forgery and offences against the currency.....	9	1	113	7	122	8
VI. Other offences not included in the above offences.	44	9	89	20	133	29
<b>Total.....</b>	<b>3,233</b>	<b>122</b>	<b>3,071</b>	<b>217</b>	<b>6,304</b>	<b>339</b>
<b>Total 1885-1920.....</b>	<b>47,993</b>	<b>1,959</b>	<b>46,689</b>	<b>3,662</b>	<b>94,682</b>	<b>5,621</b>
<b>Yearly average 1885-1920.....</b>	<b>1,333</b>	<b>54</b>	<b>1,241</b>	<b>102</b>	<b>2,630</b>	<b>156</b>

**31.—Charges, Acquittals, Convictions and Sentences in respect of Indictable Offences, 1915-1920.**

Charges and Sentences.	1915.	1916.	1917.	1918.	1919.	1920.
	No.	No.	No.	No.	No.	No.
Charges.....	26,714	23,942	19,454	21,747	23,021	23,213
Acquittals <sup>1</sup> .....	6,060	4,757	3,868	4,356	4,592	4,746
Persons detained for lunacy.....	29	25	27	21	33	24
Convictions.....	20,625	19,160	15,559	17,370	18,396	18,443
Males.....	19,624	15,486	13,086	14,871	16,161	16,722
Females.....	1,001	3,674	2,473	2,499	2,235	1,721
First conviction.....	17,695	16,806	13,093	14,310	15,118	15,086
Second conviction.....	1,776	1,337	1,373	1,551	1,641	1,668
Reiterated conviction.....	1,154	1,017	1,093	1,509	1,637	1,679
Sentences—						
Option of a fine.....	5,344	6,786	4,845	5,106	5,053	5,447
Under one year in gaol.....	5,774	3,816	2,890	3,284	3,455	3,750
One year and over in gaol.....	893	666	462	783	921	886
Two years and under five in penitentiary.....	1,074	799	540	701	978	873
Five years and over in penitentiary.....	241	178	145	185	229	245
For life in penitentiary.....	7	5	1	4	7	7
Death.....	34	21	15	20	28	26
Committed to reformatories.....	517	568	584	678	678	615
Other sentences.....	6,741	6,321	6,077	6,609	7,047	6,594

<sup>1</sup> Includes cases where proceedings were stayed, disagreement of jury, etc.



## 32.-Classification of Persons Convicted of Indictable Offences, 1914-1920.

Classes.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
	No.	No.	No.	No.	No.	No.	No.
Occupations—							
Agricultural.....	1,267	1,312	899	904	1,152	966	1,091
Commercial.....	1,947	2,039	1,472	1,424	1,813	1,963	2,213
Domestic.....	1,106	955	914	1,390	1,866	1,608	1,354
Industrial.....	1,798	1,573	1,049	937	1,214	1,424	1,483
Professional.....	149	238	496	390	359	315	168
Labourer.....	7,768	6,736	4,155	3,513	4,403	5,232	5,347
Not given.....	7,393	7,772	10,175	7,001	6,563	6,888	6,787
Civil condition—							
Married.....	4,584	4,323	3,761	3,450	4,474	4,472	4,434
Single.....	10,968	11,320	8,373	8,700	10,339	11,081	10,760
Widowed.....	154	136	142	110	269	315	196
Not given.....	5,732	4,846	6,884	3,299	2,288	2,528	3,053
Educational status—							
Unable to read or write....	769	1,066	1,007	763	1,084	843	925
Elementary.....	14,865	14,138	11,045	11,390	14,042	14,408	14,179
Superior.....	415	332	269	289	192	282	258
Not given.....	5,389	5,089	6,939	3,117	2,052	2,863	3,081
Ages—							
Under 16 years.....	2,628	3,050	3,157	3,606	4,104	3,876	3,355
16 years and under 21.....	2,652	2,719	1,575	1,928	2,938	3,846	3,288
21 years and under 40.....	8,831	8,114	5,878	5,511	6,728	6,446	7,216
40 years and over.....	2,158	2,036	1,758	1,448	1,748	1,795	1,795
Not given.....	5,169	4,706	6,792	3,066	1,852	2,433	2,789
Use of liquors—							
Moderate.....	7,539	7,394	7,377	5,387	11,656	10,726	11,000
Immoderate.....	3,174	2,348	1,891	1,332	1,357	1,276	1,232
Not given.....	10,725	10,883	9,892	8,840	4,357	6,394	6,211
Birthplace—							
England and Wales.....	1,872	1,482	952	780	1,177	1,329	1,489
Ireland.....	472	327	260	180	285	193	247
Scotland.....	675	473	321	242	381	381	462
Canada.....	9,162	9,172	7,428	7,097	9,322	10,157	9,570
Other British Possessions.....	151	132	57	95	152	90	106
United States.....	1,015	980	916	845	947	990	1,148
Other foreign countries.....	3,516	3,741	2,697	2,228	3,161	2,780	2,589
Not given.....	4,575	4,318	6,529	4,092	1,945	2,476	2,832
Religion—							
Baptist.....	333	379	287	402	385	383	447
Roman Catholic.....	6,355	6,245	4,918	5,367	6,959	6,896	6,093
Church of England.....	2,515	2,208	1,525	1,576	1,910	2,186	2,234
Methodist.....	1,434	1,389	1,107	1,186	1,368	1,589	1,503
Presbyterian.....	1,495	1,367	965	1,034	1,397	1,432	1,621
Protestant.....	2,502	2,294	1,921	1,286	1,618	1,683	1,671
Jews.....	—	—	—	—	—	—	519
Other denominations.....	1,425	1,777	1,228	1,054	1,506	1,438	802
Not given.....	5,379	4,966	7,209	3,654	2,227	2,789	3,553
Residence—							
Cities and towns.....	15,544	14,662	11,294	11,157	14,190	16,305	16,178
Rural districts.....	2,210	2,434	1,801	1,501	1,779	2,051	2,111
Not given.....	3,684	3,529	6,065	2,091	1,401	40	154

## 33.—Indictable and Summary Convictions by Classes of Offences, 1914-1920.

## A.—NUMBERS.

Classes of Offence.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
	No.	No.	No.	No.	No.	No.	No.
Offences against the person...	12,136	10,664	9,327	6,852	7,292	7,731	8,281
Offences against property with violence.....	1,810	2,234	1,478	1,321	2,049	2,606	2,310
Offences against property without violence.....	14,645	14,269	11,018	9,886	10,743	11,508	11,634
Other felonies and misdemeanours.....	1,952	1,525	1,459	1,271	1,390	1,656	2,059
Totals for criminal offences.	30,543	28,692	23,282	19,330	21,474	23,501	24,284
Breach of Municipal Acts and By-laws.....	33,570	31,312	28,411	32,718	38,401	39,593	59,378
Breach of liquor laws.....	5,871	5,452	6,243	7,339	7,472	7,383	10,247
Drunkenness.....	60,067	41,161	32,730	27,882	21,026	24,217	39,769
Vagrancy.....	15,263	11,461	6,634	4,406	3,867	4,097	5,607
Loose, idle and disorderly.....	9,063	6,435	4,688	2,264	2,614	2,496	2,134
Keeping bawdy houses and inmates thereof.....	4,935	5,464	4,374	4,443	5,620	5,567	3,821
Miscellaneous minor offences.	23,723	23,078	17,424	15,629	22,795	23,166	17,468
Totals for minor offences...	152,492	124,363	100,509	94,681	101,795	106,519	138,424
<b>Grand totals.....</b>	<b>183,035</b>	<b>153,055</b>	<b>123,791</b>	<b>114,011</b>	<b>123,269</b>	<b>130,019</b>	<b>162,708</b>

## B.—RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.

Classes of Offence.	1916.		1917.		1918.		1919.		1920.	
	Per cent.	Per 100,000	Per cent.	Per 100,000	Per cent.	Per 100,000	Per cent.	Per 100,000	Per cent.	Per 100,000
Offences against the person.	7.5	116	6.0	84	5.9	88	6.0	91	5.1	96
Offences against property with violence.....	1.2	18	1.2	16	1.7	25	2.0	31	1.4	27
Offences against property without violence.....	8.9	137	8.6	121	8.7	129	8.8	136	7.1	135
Other felonies and misdemeanours.....	1.2	18	1.1	15	1.1	16	1.3	19	1.3	23
Totals for criminal offences.	18.8	289	16.9	236	17.4	258	18.1	277	14.9	281
Breach of Municipal Acts and By-laws.....	22.9	354	28.6	400	31.1	461	30.5	467	36.5	688
Breach of liquor laws.....	5.0	78	6.4	90	6.1	90	5.7	87	6.3	119
Drunkenness.....	26.5	407	24.4	341	17.1	252	18.6	286	24.4	461
Vagrancy.....	5.4	83	4.0	53	3.1	46	3.1	49	3.4	65
Loose, idle and disorderly.....	3.8	58	2.0	28	2.1	31	1.9	29	1.3	25
Keeping bawdy houses and inmates thereof.....	3.5	54	4.0	54	4.6	68	4.3	66	2.3	44
Miscellaneous minor offences	14.1	217	13.7	191	18.5	274	17.8	272	10.9	202
Totals for minor offences...	81.2	1,251	83.1	1,157	82.6	1,222	81.9	1,256	85.1	1,604
<b>Grand totals.....</b>	<b>100</b>	<b>1,540</b>	<b>100</b>	<b>1,393</b>	<b>100</b>	<b>1,480</b>	<b>100</b>	<b>1,533</b>	<b>100</b>	<b>1,885</b>

**Increase of Drunkenness.**—The number of summary convictions for drunkenness in Canada was 39,769 in 1920, as compared with 24,217 in 1919, an increase of 15,552, or 64.22 p.c. Table 34 shows the number of convictions by provinces for the five years 1916 to 1920, with increases and decreases for 1920 as compared with 1919, from which it will be seen that drunkenness, at least as measured by statistics of summary convictions, increased during the year 1920 in every province and in Yukon Territory.

## 34.—Convictions for Drunkenness for the Five Years 1916-1920.

Provinces.	1916.	1917.	1918.	1919.	1920.	Increase (+) or Decrease (—) 1920 as compared with 1919.	
	No.	No.	No.	No.	No.	Numerical.	Per cent.
Prince Edward Island.....	219	207	96	116	120	+	4
Nova Scotia.....	3,614	2,546	2,435	2,879	3,140	+	261
New Brunswick.....	1,696	1,516	704	1,350	1,882	+	532
Quebec.....	7,108	8,025	6,680	7,116	11,863	+	4,747
Ontario.....	11,728	10,945	7,932	8,498	15,021	+	6,523
Manitoba.....	3,114	1,085	1,123	1,570	2,330	+	760
Saskatchewan.....	1,062	770	434	618	919	+	301
Alberta.....	1,809	391	825	1,057	1,536	+	479
British Columbia.....	2,327	2,372	778	1,004	2,948	+	1,944
Yukon Territory.....	53	25	19	9	10	+	1
<b>Canada.....</b>	<b>32,730</b>	<b>27,882</b>	<b>21,026</b>	<b>24,217</b>	<b>39,769</b>	<b>+</b>	<b>15,552</b>
							<b>+ 64.22</b>

## 35.—Population of Penal Institutions, 1918-1920.

Penal Institutions.	1918.			
	Number of Prisoners			
	In custody beginning of year.	Admitted during year.	Discharged during year.	In custody end of year.
Penitentiaries.....	1,505	963	825	1,643
Reformatories for boys.....	1,189	1,721	1,715	1,195
Reformatories for girls.....	309	257	255	311
Jails.....	2,004	29,485	29,437	2,052
<b>Totals.....</b>	<b>5,007</b>	<b>32,426</b>	<b>32,232</b>	<b>5,201</b>
	1919.			
	In custody beginning of year.	Admitted during year.	Discharged during year.	In custody end of year.
Penitentiaries.....	1,656	1,199	829	2,026
Reformatories for boys.....	1,270	2,033	1,984	1,319
Reformatories for girls.....	309	187	198	298
Jails.....	2,052	32,534	32,450	2,136
<b>Totals.....</b>	<b>5,287</b>	<b>35,953</b>	<b>35,461</b>	<b>5,779</b>
	1920.			
	In custody beginning of year.	Admitted during year.	Discharged during year.	In custody end of year.
Penitentiaries.....	1,708	1,069	764	2,013
Reformatories for boys.....	1,638	4,382	4,280	1,740
Reformatories for girls.....	312	327	359	280
Jails.....	1,889	32,369	32,135	2,123
<b>Totals.....</b>	<b>5,547</b>	<b>38,147</b>	<b>37,538</b>	<b>6,156</b>

## Penitentiaries.

The statistics of penitentiaries given in Tables 36-39, are compiled from the annual reports to the Minister of Justice of the Inspectors of Penitentiaries. The report for the fiscal year 1920-21, in reference to the parole system, states that the total number of paroles granted during twenty-two years of operation is 13,512. A total of 12,152 persons have completed their probation on parole and occupy positions in good citizenship to-day, and 588 prisoners are now reporting and have in prospect the completion of their probation on parole. The total delinquency for non-compliance with conditions of license is 469, or 3.5 p.c., and for subsequent conviction 303, or 2.2 p.c., making a total delinquency of 5.7 p.c.

## 36.—Movements of Convicts, 1916-1921.

Schedule.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.
In custody at beginning of fiscal year.....	2,064	2,118	1,694	1,468	1,689	1,931
Received—						
By forfeiture of parole.....	11	11	10	4	9	2
Paroles revoked.....	4	31	9	3	2	1
Recaptured.....	1	1	1	3	—	4
By transfer.....	24	10	19	15	150	36
From jails, etc.....	900	630	625	979 <sup>1</sup>	1,005	995
<b>Totals.....</b>	<b>3,004</b>	<b>2,801</b>	<b>2,358</b>	<b>2,472</b>	<b>2,855</b>	<b>2,969</b>
Released by—						
Death.....	11	12	11	45	12	19
Escape.....	1	3	1	3	5 <sup>3</sup>	10 <sup>4</sup>
Expiry of sentence.....	304	408	268	212	201	308
Order of the court.....	9	4	6	44 <sup>2</sup>	13	8
Pardon.....	4	65	66	160	208	4
Parole.....	423	526	455	252	275	374
Transfer.....	24	9	17	16	163	36
Deportation.....	101	76	59	39	35	52
Sent to reformatory.....	1	—	—	—	—	—
Returned—insane.....	8	—	—	—	—	—
Returned to Provincial authorities.....	—	4	7	12	11	8
By military order.....	—	—	—	—	1	—
<b>In custody at end of fiscal year.....</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468</b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>

<sup>1</sup>Includes 84 from military courts.<sup>3</sup>From asylums.<sup>2</sup>Includes 25 from military order.<sup>4</sup>One from asylum.

## 37.—Number of Deaths, Escapes, Pardons and Paroles, 1916-1921.

Schedule.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.
Deaths.....	11	12	11	45	12	19
Escapes.....	1	3	1	3	5	10
Pardons.....	4	65	66	160	208	4
Paroles.....	423	526	455	252	275	374

## 38.—Age of Convicts, 1915-1921.

Ages.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.	No.
Under 20 years.....	187	212	141	115	228	335	289
From 20 to under 30 years.....	917	941	714	616	718	775	969
From 30 to under 40.....	553	563	473	405	395	434	479
From 40 to under 50.....	240	253	241	205	218	251	242
From 50 to under 60.....	121	119	99	91	97	100	130
Over 60 years.....	46 <sup>1</sup>	30	26	31	33	36	41
<b>Totals.....</b>	<b>2,064</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>

<sup>1</sup>Includes one age unknown.<sup>2</sup>Includes five not given (insane).



## 33.—Classification of Convicts, 1915-1921.

Classes.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
	No.	No.	No.	No.	No.	No.	No.
<b>By Race—</b>							
African.....	62	63	56	64	52	57	67
Caucasian.....	1,929	1,970	1,553	1,333	1,585	1,820	2,019
Indian.....	20	19	20	21	13	24	31
Indian Half-breed.....	14	19	21	15	12	8	8
Mongolian.....	39	47	38	29	24	22	25
East Indian.....	—	—	6	1	3	—	—
<b>Totals.....</b>	<b>2,064</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>
<b>By Nationality—</b>							
British—							
Australian.....	7	—	—	—	—	—	—
Canadian.....	1,088	1,185	936	796	945	1,107	1,277
English.....	195	169	126	103	103	93	160
Irish.....	59	43	41	31	38	29	39
Scotch.....	47	40	24	26	35	36	31
Other British.....	28	26	22	21	19	20	14
Foreign—							
American (U.S.).....	210	204	182	165	163	209	199
Austrian and Hungarian.....	126	148	104	80	113	108	108
Chinese.....	22	32	32	26	22	21	21
French.....	12	11	8	5	4	12	10
German.....	29	23	17	15	15	18	—
Italian.....	95	68	61	61	66	81	72
Russian.....	53	86	74	73	83	93	83
Scandinavian.....	28	29	18	17	20	15	13
Other foreign.....	65	54	49	45	63	89	123
<b>Totals.....</b>	<b>2,064</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>
<b>By Conjugal State—</b>							
Single.....	1,356	1,358	1,028	892	1,044	1,218	1,456
Married.....	634	677	589	504	567	638	626
Widowed.....	70	79	77	67	78	75	68
Divorced.....	4	4	—	—	—	—	—
<b>Totals.....</b>	<b>2,064</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>
<b>By Sex—</b>							
Male.....	2,033	2,081	1,659	1,433	1,649	1,917 <sup>3</sup>	2,125
Female.....	31	37	35	35	40	14	25 <sup>4</sup>
<b>Totals.....</b>	<b>2,064</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>
<b>By Social Habits—</b>							
Abstainers.....	359	376	299	286	409	548	590
Temperate.....	987	1,008	837	745	844	975	1,092
Intemperate.....	717	734	558	432	436	408	468
<b>Totals.....</b>	<b>2,064<sup>4</sup></b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>
<b>By Religion—</b>							
Anglican.....	340	330	266	204	227	301	356
Baptist.....	112	101	78	91	98	111	113
Buddhist.....	20	40	33	25	17	7	12
Congregationalist.....	9	7	not given.	not given.	not given.	not given.	not given.
Greek Catholic.....	45	52	42	34	38	57	73
Jewish.....	17	26	23	20	28	38	34
Lutheran.....	71	71	51	47	58	46	37
Methodist.....	218	205	169	146	168	187	207
Presbyterian.....	228	222	155	134	153	193	207
Roman Catholic.....	961	1,025	841	716	824	946	1,052
Salvation Army.....	5	7	not given.	not given.	not given.	not given.	not given.
Other Creeds.....	30	19	28	34	65	45	59
No creed.....	8	13	8	12	13	—	—
<b>Totals.....</b>	<b>2,064</b>	<b>2,118</b>	<b>1,694</b>	<b>1,468<sup>2</sup></b>	<b>1,689</b>	<b>1,931</b>	<b>2,150</b>

<sup>1</sup> Including Danish, Norwegian, and Swedish.<sup>2</sup> Includes five not given (insane).<sup>3</sup> Females in Kingston Penitentiary included, not given separately in report.<sup>4</sup> Includes one not given (insane).<sup>5</sup> In Kingston Penitentiary only.

## 40.—Statistics of Divorces Granted in Canada, 1868-1921.

Year.	Granted by the Dominion Parliament.				Granted by the Courts.			Total for Canada.
	Ontario.	Quebec.	Northwest Territories.	Manitoba.	Nova Scotia.	New Brunswick.	British Columbia.	
1868.....	—	—	—	—	3	—	—	3
1869.....	1	1	—	—	1	2	—	5
1870.....	—	—	—	—	2	1	—	3
1871.....	—	—	—	—	2	2	—	4
1872.....	—	—	—	—	1	3	—	4
1873.....	1	—	—	—	3	—	—	4
1874.....	—	—	—	—	—	—	—	—
1875.....	1	—	—	—	4	—	—	5
1876.....	—	—	—	—	1	2	—	3
1877.....	3	—	—	—	5	—	1	9
1878.....	2	1	—	—	1	3	1	8
1879.....	1	—	—	—	1	2	—	4
1880.....	—	—	—	—	3	2	—	5
1881.....	—	—	—	—	2	2	3	7
1882.....	—	—	—	—	4	1	1	6
1883.....	—	—	—	—	3	7	3	13
1884.....	1	—	—	—	4	3	2	10
1885.....	4	1	—	—	4	3	—	12
1886.....	1	—	—	—	4	5	1	11
1887.....	2	3	—	—	1	3	1	10
1888.....	2	1	—	—	3	1	2	9
1889.....	3	1	—	—	3	6	2	15
1890.....	2	—	—	—	4	3	3	12
1891.....	4	—	—	—	3	—	3	10
1892.....	1	1	1	1	3	5	3	15
1893.....	3	4	—	—	5	2	—	15
1894.....	5	1	—	—	1	—	2	9
1895.....	3	—	—	—	5	5	—	13
1896.....	—	—	—	—	6	1	3	10
1897.....	1	—	—	—	2	—	3	6
1898.....	2	1	—	—	2	5	6	16
1899.....	2	1	1	—	5	3	2	14
1900.....	2	1	—	1	1	1	4	11
1901.....	2	—	—	—	10	—	7	19
1902.....	2	—	—	—	9	1	3	15
1903.....	2	1	1	1	8	4	4	21
1904.....	5	1	—	—	6	2	5	19
1905.....	2	3	2	2	6	2	18	35
			Albert. Sask.					
1906.....	10	3	1	—	5	1	17	37
1907.....	3	1	—	—	8	3	9	25
1908.....	8	—	—	—	5	5	12	30
1909.....	8	4	1	1	8	5	22	51
1910.....	14	2	—	1	3	6	12	51
1911.....	13	4	2	—	3	6	19	57
1912.....	9	3	2	1	1	4	11	35
1913.....	20	4	4	1	6	4	20	59
1914.....	18	7	4	2	2	10	15	70
1915.....	10	3	3	1	1	13	6	53
1916.....	18	1	1	2	2	14	18	67
1917.....	10	4	2	1	—	8	23	54
1918.....	10	2	2	1	—	10	65	90
1919.....	49	4	36 <sup>3</sup>	3	88 <sup>3</sup>	36	147	376
1920.....	91	9	65 <sup>4</sup>	26 <sup>4</sup>	42 <sup>4</sup>	45	136	429
1921.....	101	9	84 <sup>4</sup>	50 <sup>4</sup>	122 <sup>4</sup>	41	128	548

NOTES.—In Prince Edward Island only one divorce has been granted since 1868 to 1921; this was granted in 1913. In British Columbia, in addition to the divorces, 13 judicial separations have been granted; one in 1892, one in 1899, two in 1900, two in 1903, three in 1913, three in 1914. In consequence of a decision of the Imperial Privy Council divorces in Manitoba, Saskatchewan and Alberta have subsequently to 1918 been granted by the Courts of these provinces. <sup>1</sup>Includes one judicial separation. <sup>2</sup>Includes one not effective till court costs are paid. <sup>3</sup>One by Parliament. <sup>4</sup>Granted by Courts.

### THE DOMINION BUREAU OF STATISTICS.

The Dominion Bureau of Statistics was set up by statute in 1918 as a central statistical department for Canada; (8-9 Geo. V, c. 43.—“An Act respecting the Dominion Bureau of Statistics”). The Act was a consolidation of all previous statistical legislation (the Census Act, the General Statistics Act, the Railway Statistics Act, etc.), with important additions.

The Act was based on the report of a Commission on Statistics appointed in 1912, which criticized severely the omissions, inequalities, overlappings and lack of coherence and common purpose in Canadian official statistics, and recommended (a) a series of specific reforms and enlargements, and (b) a policy of statistical co-ordination for the Dominion under central direction.<sup>1</sup>

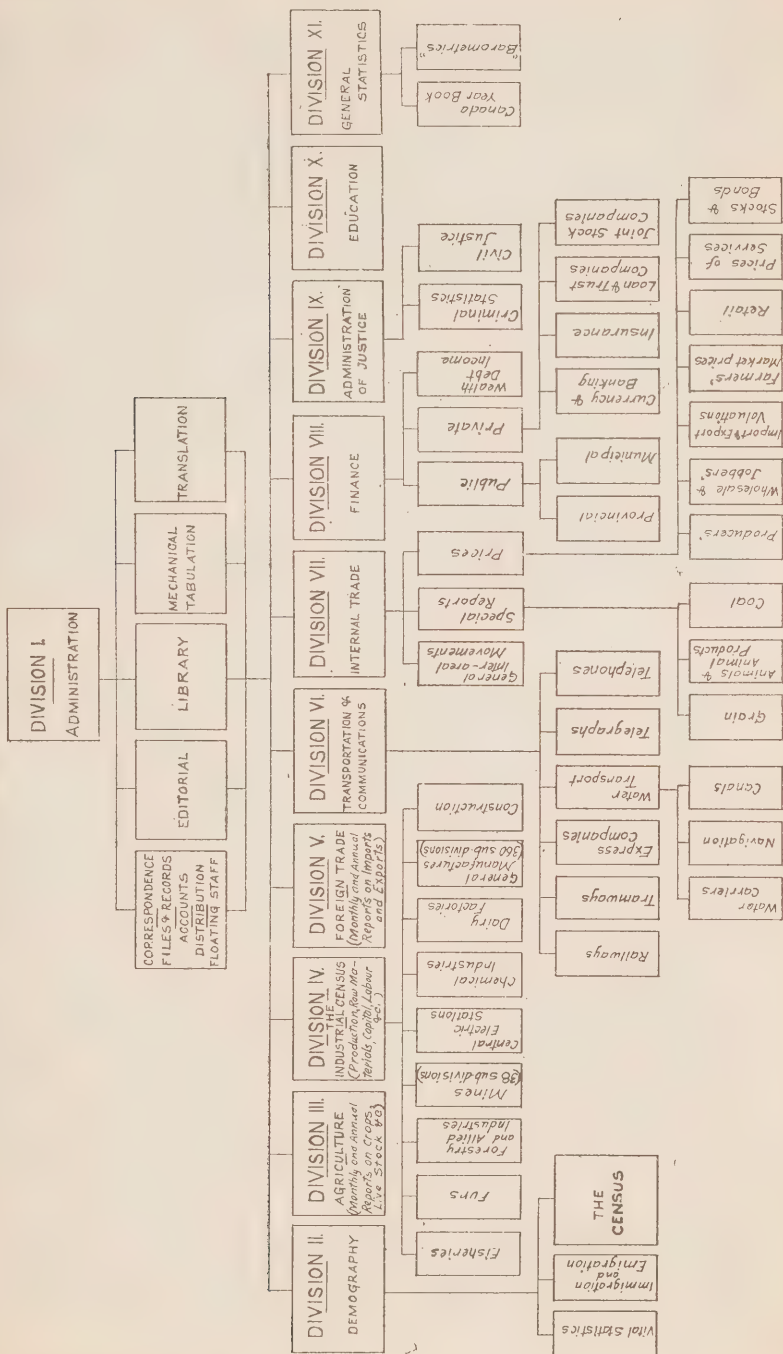
In 1915, following the recommendations of this report, the office of Dominion Statistician was created and the next two years were devoted to the drafting in detail of the various plans involved, which included a monograph on each important field of statistics, covering the statistical work of all the Departments. A memorandum entitled “A National System of Statistics for Canada,” was printed for the Cabinet prior to the final adoption of these plans. Subsequently the Bureau was created in 1918.

#### Creation of the Bureau.

The Bureau was constituted by the transfer or absorption by Orders in Council of the following work and branches: (1) The Census and Statistics Office (covering the census, and also agriculture, general manufactures and criminal justice); (2) Fisheries Statistics, (3) Mining Statistics, (4) Forestry Statistics, (5) Dairying and Fruit Statistics, (6) Water and Electric Power Statistics, (7) The Railways and Canals Statistical Branch of the Department of Railways and Canals, (8) the Trade Statistical Branch (exports and imports), (9) Grain Trade Statistics, (10) Live Stock Statistics, and (11) Prices Statistics (in part). In addition four new branches were erected, dealing respectively with Public Finance, Internal Trade, Vital Statistics and Education. Subsequently the statistical activities of the Fuel Controller and of the Board of Commerce were absorbed. Modifications of the Bankruptcy, Public Health, and Railway Acts and of the Regulation on franking privileges were also made.

<sup>1</sup>Other official bodies had drawn equally pointed attention to the deficiencies in Canadian statistics. These statistics had previously consisted of reports brought out independently by Dominion and Provincial Departments on subjects within their respective interests. The B.N.A. Act had assigned “statistics” to the Dominion Government, implying that statistics are a national concern and that it is the duty of the Dominion Government, while not precluding provincial statistics, to organize the field from a national standpoint. Previously to 1916 that duty had not been undertaken. For a brief account of Dominion and Provincial statistical activities from the earliest times up to 1912, see “First Annual Report of the Dominion Statistician, 1919,” pp. 9-14, which sums up as follows: “A considerable but desultory body of statistics had grown into existence, in certain sections good work was being done—in others not good. There was much duplication and at the same time numerous gaps at crucial points, finally there was a total lack of general plan. The embarrassment which this caused with the growth of the country and the increasing complexity of its problems will be appreciated.”

# DOMINION BUREAU OF STATISTICS (1919-1920)





### **The Working Constitution of the Bureau.**

The Act makes the Bureau responsible for the statistics "relative to the commercial, industrial, social, economic and general activities and conditions of the people,"—a universal mandate. Certain statistics, however, originate as by-products in particular departments, or can best be collected through the field staffs or other machinery of such departments. These should not only meet the requirements of the departments in question, but should constitute an integral part of the general system. The Act accordingly assigns to the Bureau the further task of "collaborating with all other departments of the Government in the compilation and publication of statistical records of administration." The machinery for this collaboration is provided by a Regulation dated October 12, 1918, which gives the Dominion Statistician direct access to heads of departments for conference purposes, with an instruction after such conference to prepare a recommendation for Council, such recommendation on approval to constitute a permanent arrangement governing the particular subject dealt with. A further Regulation provides for central machine compilation as an adjunct to the system. In this way the Bureau is constituted as a comprehensive central statistical office, working for the most part under the Governor in Council, all purely statistical work having been brought by transfer under its immediate direction, whilst remaining departmental statistics are indirectly controlled.

Control over Provincial statistics (which, under the B.N.A. Act, include some most important subjects) is secured through a clause permitting Provincial officers to serve as agents under the Statistics Act. A further clause gives the Bureau right of access to all Provincial, municipal or corporation records.

### **The Purpose of Statistical Centralization.**

The purpose of statistical centralization includes, of course, the numerous economies in "overhead" which concentration promotes, as in staff, equipment, elimination of duplication, etc. For example, two pronounced characteristics of statistical work are (a) the large proportion of routine, and (b) its ebb and flow; a "floating" staff is accordingly a feature of a central bureau. The use of electrical tabulating machinery, again, has revolutionized statistical work, but it effects an economy only on large-scale (i.e., centralized) operations. (The Bureau has an investment of over \$125,000 in machinery.) Central library, record, and administration systems are further examples. Still another economy, from a different angle, flows from the concentration of statistical experience, as a result of the bringing together of the higher statistical officers of the government. The convenience of the public is also promoted by having statistics all in one place.

But the fundamental purpose of statistical centralization lies in the fact that its great subjects, such as production, trade, finance, population, etc., are not separate and distinct, but are closely inter-related. The state, in other words, is not a series of heterogeneous

activities, but is itself an entity. The statistics of the country must therefore be framed to illustrate these relationships. For example, if the statistics of mines, fisheries, manufactures, and other phases of production are carried out in a series of water-tight compartments, the phenomena common to all, such as labour, capital equipment, etc., will inevitably be handled differently, with non-comparable results. Again, if one system of classifying commodities is employed by the Trade Statistician, another by the Production Statistician, and another by the Prices Statistician, no general study of conditions surrounding a particular group of commodities can be made; similarly, the classification of occupations should be uniform, whether in the Census analysis of population, in the vital statistical record of deaths, in criminal and in labour statistics, and so on. Again, on points of method like the construction of index numbers—clearly such devices should yield results that are comparable from field to field. In brief, a true national statistic is not a mere aggregation of the statistics of different activities, but involves also a purview of the totality of phenomena with the object of revealing their interplay, and, if possible, the controlling forces from time to time. Not only should the State be provided with statistics on the main subjects of national interest, but these statistics should be properly “articulated” with each other, so as to form in as far as possible a single conspectus.

#### **Progress under the Bureau to Date.**

The Bureau has completed the plans for a unified, nationwide statistical system, covering every important phase of social and economic activity, and has carried them out to a considerable degree, though part is not yet realized. The First Annual Report of the Dominion Statistician contained a full description of the organization of the Bureau and of its subject-matter. The chart on page 827 is from that report, and shows the eleven main branches under which the work of the Bureau is conducted. A list of the publications is also attached as further indicating its scope.

In briefest form, the chief reorganizations effected to date are as follows (a complete memo as to policies involved in each case being contained in the Report above mentioned):

(1) The Census (decennial and quinquennial) has been reorganized as a stock-taking of the people and their basic industry, and its true place as such in the national statistical system and in relation to other fields of statistics determined; it has been considerably simplified as a result of the Bureau's widened control of allied statistics.

(2) A national scheme of vital statistics, made possible by inducing the provinces to enact uniform legislation drafted by the Bureau, and to accept uniform administration of the same and on standard forms issued by the Bureau, has been established.

(3) The monthly and annual statistics of agriculture (crop reports, live stock, etc.) have been brought under joint operation of the Bureau and the nine Provincial Governments, to the material improvement of these data.

(4) The statistics of fisheries, mines, forestry, dairying, central electric power and manufactures have been unified and placed on an annual basis (Industrial Census) in co-operation with the several Dominion and Provincial Departments concerned; altogether the statistical activities of over 30 Departments, have been brought into harmony. In conjunction with (3) this provides comprehensive and up-to-date information on all phases of production.

(5) The statistics of foreign trade and of transportation and communications have been completely re-modelled; in trade statistics a saving of \$25,000 a year has been effected, whilst the scope of the data and the efficiency of the service has been greatly increased.

(6) A Branch dealing with the more important aspects of internal trade, including interprovincial movements, the marketing of staple commodities (grain, livestock, fruits, etc.), and a complete system of prices statistics has been established.

(7) Criminal Statistics have been reorganized and co-ordinated with the Census and other social statistics.

(8) Substantial beginnings have been made in the comprehensive treatment of public finance and of education—the latter in collaboration with the nine Provincial Governments.

(9) Relations between the Bureau and the Department of Labour have been reduced to a formal arrangement.

(10) The Canada Year Book, as a digest of general statistics, has been continuously improved.

(11) A library of the statistics of all countries has been established, and a central mechanical tabulation service for other departments has been put in operation.

The main achievement of the Bureau, however, has been in the organization of these several subjects in correlation with each other in accordance with a general plan, and the consequent establishment of a comprehensive viewpoint of the country as a "going concern". In addition, there has been created what is frequently called a central "thinking office" in statistics, continuously in touch with general conditions and the line of probable developments.

### Conclusion.

The final concept in the organization of the Bureau of Statistics is that of a national laboratory for social and economic research. Statistics are not merely a record of what has been, but are for use in planning what shall be; it is the duty of a statistical bureau to assist directly in the day-to-day problems of administration, as well as to provide their theoretic background. The action of several large universities in establishing research departments, and the endowment of the National Bureau of Economic Research in the United States are suggestive in this regard. In Germany, the Central Statistical Department has been for many years one of the most powerful engines of Government, its organization permeating the country, embracing 17 subsidiary state bureaus and 45 municipal offices. One of the

most significant of recent developments in administration is the extent to which statistical organization has been increased as a guide to national policy. Though its usefulness is only begun, the Dominion Bureau of Statistics has laid the foundations for a service of the first rank, comparable with the increasingly important position taken by Canada in the economic and political world.

#### **Publications of the Dominion Bureau of Statistics.**

The Dominion Bureau of Statistics is organized in the following Branches, namely: I. Administration; II. Demography—Census and Vital Statistics; III. Agricultural Statistics; IV. Fisheries, Furs and Dairy Products; V. Mining, Metallurgical and Chemical; VI. Forestry and allied industries; VII. General Manufacturers; VIII. External Trade (Imports and Exports); IX. Internal Trade; X. Transportation; XI. Financial Statistics; XII. Statistics of Administration of Justice; XIII. Education Statistics; XIV. General Statistics. The publications of the several Branches are as follows:

#### **ADMINISTRATION—**

Annual Report of Dominion Statistician.

#### **DEMOGRAPHY—**

##### *Census.—*

Bulletins of the Sixth Census of Canada, 1921. (A bulletin on the Population and area of each Province by Electoral districts, Cities, Towns and Villages, with a summary of rural and urban.) The reports of the 1921 census will include two volumes on population and one on agriculture. A bulletin on the agriculture of each province will also be issued.

Reports of the Fifth Census of Canada, 1911: Vol. I. Areas and Population by Provinces, Districts and Subdistricts, with Introduction, Tables 1 to XV, pp. i-viii, 1-623. Vol. II. Religions, Origins, Birthplace, Citizenship, Literary and Infirmities by Provinces, Districts and Subdistricts, with Introduction. Tables I-XLVI, pp. i-iv, 1-634. Vol. III. Manufactures for 1910 as enumerated in June, 1911, with Introduction. Tables I-XX, pp. i-xvi, 1-432. Vol. IV. Agriculture, with Introduction. Tables 1-90, I-XXXV, pp. i-xcv, 1-428. Diagrams 5 pp. Vol. V. Forest, Fishery, Fur and Mineral Production, with Introduction. Tables 1-51, I-XXVI; pp. i-l, 1-171. Vol. VI. Occupations of the People, with Introduction. Tables 1-25, I-VI, pp. i-xxxi, 1-469.

Bulletins of the Fifth Census of Canada, 1911: Manufactures of Canada—Dairy Industries—Agriculture, Prince Edward Island—Agriculture, Nova Scotia—Agriculture, New Brunswick—Agriculture, Quebec—Agriculture, Ontario—Agriculture, Manitoba—Agriculture, Saskatchewan—Agriculture, Alberta—Agriculture, British Columbia—Religions—Origins of the People—Birthplace of the People—Educational Status—Mineral Production—Infirmities—Ages—School Attendance.

Special Report of the Foreign-born Population. (Abstracted from the Records of the Fifth Census of Canada, June, 1911, 23 tables, 62 pp., 1915.)

Report of the Census of Population and Agriculture of the Prairie Provinces, 1916. Tables 1-54; I-XXVI, pp. i-lxiv, 1-356.

*Vital Statistics.*—Annual Report on Vital Statistics of Canada by provinces and municipalities. Monthly Report of Births, Marriages and Deaths, by provinces. Report of Conference on Vital Statistics, held June 19-20, 1918, pp. 1-48. (*Out of print.*)



## PRODUCTION—

### *I. General Summary of Production.—*

Including (1) Primary Production (Agriculture, Fishing, Furs, Forestry and Mining), and (2) Secondary Production, or General Manufactures.

### *II. Agriculture.—*

(1) Monthly Bulletin of Agricultural Statistics. (Contains monthly reports on agricultural conditions, prices, weather, etc.—preliminary, provisional and final estimates of areas, yields, quality and values of field crops—numbers and values of farm live stock, poultry, etc.—fruit statistics—stocks of grain—annual summary of agricultural production—international agricultural statistics.) (2) Advance Summaries of Agricultural Statistics. (The more important statements from the Bulletin in mimeographed form.)

### *III. Furs.—*

(1) Annual Report on Fur Farms. (2) Annual Report on the Production of Raw Furs.

### *IV. Fisheries.—*

(1) Annual Report of Fisheries Statistics. (2) Advance Summary of Fish caught, marketed and prepared.

### *V. Forestry.—*

(1) Annual summary of the value, etc., of forest production. (Covers operations in the woods for sawmills, shingle mills, pulp and paper mills, etc., production of mining timber; production of poles and cross ties, and farm production (decennial) of fire wood, posts, etc.)

### *VI. Mineral Production: (Mining and Metallurgy).—*

(1) General Reports: (a) Annual Report on the Mineral Production of Canada; (b) Preliminary Reports (semi-annual) on the Mineral Production of Canada. (2) Coal: (a) Annual Report on Coal Statistics for Canada; (b) Monthly Report on Coal Statistics for Canada. (3) Annual Bulletins on the following subjects: (a) Gold Production; (b) Silver Production; (c) Copper Production; (d) Nickel Production; (e) Lead Production; (f) Zinc Production; (g) Copper-Gold-Silver Industry; (h) Auriferous Quartz Mining Industry; (i) Placer and Hydraulic Gold Mining Industry; (j) Nickel-Copper Industry; (k) Silver-Cobalt-Nickel Industry; (l) Silver-Lead-Zinc Industry; (m) Miscellaneous Non-Ferrous Metals, including Antimony, Molybdenite and Tungsten; (n) Asbestos Industry; (o) Feldspar Industry; (p) Graphite Industry; (q) Mica and Phosphate Mining Industries; (r) The Salt Industry; (s) Miscellaneous Non-Metallic Minerals, including Actinolite, Barytes, Chromite, Corundum, Fluorspar, Magnesite, Magnesium, Sulphate, Manganese, Mineral Pigments, Mineral Waters, Natro-alunite, Peat, Pyrites, Quartz, Sodium, Sulphate and Talc; (t) Stone Quarrying Industry; (u) Sand and Gravel Industry; (v) Portland Cement Industry; (w) Miscellaneous Clay Products, including clay sewer pipe, Brick and Tile, Stoneware and Pottery, Fire Brick and Fire Clay, Kaolin and other Clays.

### *VII. Manufactures:—*

(1) General Summary, by Provinces and leading cities—(industrial groups classified by component materials, purpose, etc.—comparative statistics.) (2) Manufacture of Vegetable Products—general report. Special Bulletins as follows: (a) Coffee and Spices; (b) Cocoa and Chocolate; (c) Fruit and Vegetable Preparation, including canning, evaporating and preserving; (d) Pickles, Sauces, Vinegar and Cider; (e) Flour and Cereal Mills; (f) Bread and other bakery products; (g) Biscuits and Confectionery; (h) Macaroni and Vermicelli; (i) Liquors, distilled; (j) Liquors, Malt; (k) Liquors, Vinous; (l) Rubber Goods and Rubber Boots and Shoes; (m) Starch and Glucose; (n) Sugar Refineries; (o) Tobacco Products; (p) Linseed Oil and Oil Cake. (3) Animal Products and their manufactures—general report. Special Bulletins as follows: (a) Dairy Products; (b) Slaughtering and Meatpacking; (c) Fish and Fish Products; (d) Leather Tanneries; (e) Harness and Saddlery; (f) Leather Boots and Shoes; (g) Leather Goods; (h) Leather Gloves and Mitts.

- (4) Textile and Allied Industries—general report. Special Bulletins as follows: (a) Cotton Textiles (Cloth, yarn, thread and waste); (b) Woollen Textiles (Cloth, yarn, blankets, felt and waste); (c) Silk Mills; (d) Clothing (Men's and women's factory and custom); (e) Hats, Caps and Furs; (f) Hosiery and Knit Goods; (g) Neckwear (Men's and Women's) and Fancy Goods; (h) Oiled Clothing and Waterproofs; (i) Corsets; (j) Carpets, Rugs and Mats; (k) Cordage, Rope and Twine.
- (5) Manufactures of Wood and Paper Products—general report. Special Bulletins as follows: (a) Lumber, Lath and Shingle Industry (containing a statistical survey of Operations in the Woods contingent to this industry); (b) Pulp and Paper; (c) Cooperage; (d) Planing Mills, Sash and Door Factories; (e) Printing, Bookbinding, Publishing, Lithographing and Engraving, Stereotyping and Electrotyping, Maps and Blue Prints; (f) Furniture; (g) Carriages, Wagons, and Sleighs, and materials thereof; (h) Canoes, Rowboats and Launches; (i) Coffins and Caskets; (j) Containers—Boxes and bags (paper); boxes and packing cases (wood); baskets and crates; woodenware.
- (6) Iron and Its Products—General Report. Special Bulletins as follows: (a) Blast Furnaces and Steel Mills (annual); (b) Foundries and Machine Shops; (c) Iron and steel fabrication; (d) Machinery; (e) Boilers and Engines; (f) Agricultural Implements; (g) Motors and Cycles; (h) Railway Equipment; (i) Heating and Ventilating appliances; (j) Wire and wire goods; (k) Sheet Metal Products.
- (N.B. A Monthly Report on the Production of Iron and Steel is issued.)
- (7) Manufactures of Non-Ferrous Metals—General report. Special Bulletins as follows: (a) Aluminium Products; (b) Brass and Copper Products; (c) Lead, Tin and Zinc Products; (d) Manufactures of precious metals; (e) Electrical apparatus.
- (8) Manufactures of Non-Metallic Minerals—general report. Special Bulletins as follows: (a) Aerated Waters; (b) Asbestos and Allied Products; (c) Coke and Gas; (d) Glass and its Products; (e) Graphite Products; (f) Petroleum Products; (g) Stone Products; (h) Abrasives.
- (9) Chemical and Allied Products—general report. Special Bulletins as follows: (a) Coal Tar and Its Products; (b) Explosives, Ammunition, Fireworks and Matches; (c) Fertilizers; (d) Medicinal and Pharmaceutical preparations; (e) Pigments, Paints and Varnishes; (f) Soap, Perfume, Cosmetics and Toilet preparations; (g) Inks, Dyes and Colour compounds; (h) Wood distillation and extracts.
- (10) Miscellaneous Manufactures. Special Bulletins as follows: (a) Brooms and Brushes; (b) Musical Instruments (including pianos and organs, and phonographs); (c) Musical Instrument Materials and Parts; (d) Buttons; (e) Trunks and Valises.
- (11) Summary Reports on Groups of Industries, classified according to the use or purpose of their principal product as follows: (a) Food; (b) Clothing; (c) Drink and Tobacco; (d) Personal and Household Goods; (e) Books; (f) Equipment; (g) Materials for further manufacture.

VIII. *Construction.* (a) The Building and general construction industry; (b) Railway, Telephone and Telegraph—Construction, Maintenance of Way and Repairs; (c) Government and Municipal Construction; (d) The Bridgebuilding Industry; (e) The Shipbuilding Industry; (f) Building Permits—Monthly Record.

#### EXTERNAL TRADE (IMPORTS AND EXPORTS)—

Annual Report of the Trade of Canada; Monthly Report of the Trade of Canada; Monthly Summary of Trade Statistics.

**INTERNAL TRADE—***Grain.*—

Annual Report on the Grain Trade of Canada; Weekly Report on the Grain Trade; Monthly Report on Mill Grind.

*Live Stock, etc.*—

Annual Report on Live Stock and Animal Products; Monthly Report on Stocks in Cold Storage; Quarterly Report on Visible Supply of Hides and Skins.

*Price Statistics (Pending).*—

Producers' Prices; Wholesale and Jobbers' Prices; Retail Prices; Municipal Market Prices; Prices of Securities; Prices of Services.

*Other.*—

Monthly Report of Visible Supply of Raw and Refined Sugar.

**TRANSPORTATION, COMMUNICATION AND PUBLIC UTILITIES—***Railways and Tramways.*—

Annual Report on Railway Statistics; Monthly Bulletin *re* Railway Revenues, Expenses, Incomes and Operating Statistics; Monthly Statement *re* Traffic of Railways.

*Express.*—

Annual Report on Express Statistics.

*Telegraphs.*—

Annual Report on Telegraph Statistics.

*Telephones.*—

Annual Report on Telephone Statistics.

*Water Transportation.*—

Report of Census of Canadian Registered Ships; Annual Report on Canal Statistics; Monthly Report on Canal Statistics; Annual Report on Navigation.

*Electric Stations.*—

Central Electric Stations in Canada.

**FINANCE—**

Annual Report on Provincial Finance; Annual Municipal Statistics of Cities of 10,000 population and over; Annual Municipal Statistics of Urban Municipalities of 3,000 to 10,000 population; Annual Municipal Statistics of Urban Municipalities of 1,000 to 3,000 population.

**JUSTICE—**

Annual Report on Criminal Statistics.

**EDUCATION—**

Report of Conference on Education Statistics, held October 27-28, 1920; Historical Statistical Survey of Education in Canada; Annual Report on Education Statistics (in press).

**GENERAL—**

The Canada Year Book, 1920, with Map of Canada and Newfoundland, a Statistical Summary of the Progress of Canada, and maps and diagrams, pp. i-xviii, 1-768.

Contents: I. Reconstruction in Canada, by S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F. R. Econ. Soc., Editor Canada Year Book, Dominion Bureau of Statistics, Ottawa. II. Chronological History of Canada. III. Physical Characteristics of Canada including Geographical Features; Economic Geology, 1919, by Wyatt Malcolm, Department of Mines, Ottawa. IV. Area and Population. V. Education. VI. Climate and Meteorology. VII. Production. VIII. Trade and Commerce. IX. Transportation and Communications. X. Labour, Wages and Prices. XI. Finance. XII. Administration. XIII. Legislation and Principal Events of the Year, 1920. XIV. Extracts from the Canada Gazette.

**List of the Principal Acts of Parliament administered by Departments of the Government of the Dominion of Canada, as compiled from information supplied by the respective Departments.**

(Numbers within parentheses denote the chapter of the Revised Statutes of Canada, 1906—R.S.C., 1906.)

**Justice.**—Department of Justice (21); Solicitor General's (22); Northwest Territories (62); Yukon (63); Dominion Police (92); Judges (138); Supreme Court (139); Exchequer Court (140); Admiralty (141); Petition of Right (142); Criminal Code (146); Penitentiary (147); Prisons and Reformatories (148); Identification of Criminals (149); Ticket of leave (150); Fugitive Offenders' (154); Extradition (155); Juvenile Delinquents (7-8 Edw. VII, c. 40, 1908); Bankruptcy, (c. 36, 1919).

**External Affairs.**—The functions and duties of this Department are defined by the Department of External Affairs Act, 1912 (2 Geo. V, c. 22) and by the International Boundary Waters Treaty Act (1-2 Geo. V, 1911, c. 28), as amended by the statute of April 3, 1914 (4 Geo. V, c. 5).

**Customs and Inland Revenue.**—Customs Tariff; Customs; Canada Shipping (in part); Infectious and Contagious Diseases affecting Animals (in part); Destructive Insect and Pest (in part); Export; Copyright (in part); Petroleum and Naphtha; Inland Revenue; Special War Revenue, 1915.

**Post Office.**—Post Office; Government Annuities; Pacific Cable; Parcel Post; Special War Revenue (in part).

**Agriculture.**—Experimental Farm Stations; Inspection and Sale, Part IX (Fruit and Fruit Marks); Dairy Industry; Cold Storage; Cold Storage Warehouse; Oleomargarine; Milk Test; Seed Control; Feeding Stuffs; Live Stock Pedigree; Live Stock and Live Stock Products; Animal Contagious Diseases; Meat and Canned Foods; Destructive Insect and Pest; Agricultural Instruction; Dairy Produce Act; Fertilizers Act.

**Interior.**—Department of the Interior; Dominion Lands; Dominion Lands Surveys; Forest Reserves and Parks; Irrigation; Railway Belt; Railway Belt, Water; Yukon; Yukon Placer Mining; Dominion Water Power; Land Titles; Northwest Game; Northwest Territories; Ordnance and Admiralty Lands; Reclamation; Seed Grain; Migratory Birds Convention Act.

**Health.**—Quarantine Act (74); Adulteration Act (133); Public Works Health Act (135); Leprosy Act (136); Canada Shipping Act (in part) (113); Proprietary or Patent Medicines Act (7-8 Edw. VII, c. 56); Opium and Narcotic Drug Act; an Act respecting Food and Drugs; an Act respecting Honey; an Act respecting Maple Products.

**Finance.**—Department of Finance and Treasury Board; Appropriation; Superannuation and Retirement; Contingencies; Consolidated Revenue and Audit; Currency; Ottawa Mint; Dominion Notes; Provincial Subsidies; Bank; Savings Bank; Penny Bank; Quebec Savings Banks; Loan Companies; Trust Companies; Bills of Exchange; Interest; The Special War Revenue Act, 1915, and amendments, 1920 (in part); The Business Profits War Tax Act, 1916, and amendments; Income Tax Act, 1917 and 1918 and amendments; Finance Act; Ottawa Improvement Commission Act.

**Militia and Defence.**—Militia Act; Royal Military College Act; Militia Pension Act; Sections 85 and 86 of the Criminal Code; the Air Board Act; Army Act; Regimental Debts' Act.

**Public Works of Canada.**—Public Works (39) and amendments (8-9 Geo. V, 1918, c. 37); Government Harbours and Piers, s. 5 (112); Navigable Waters Protection, s. 7 (115) and amendments (8-9 Geo. V, 1918, c. 33); Telegraph Secrecy (126); Dry Dock Subsidies (9-10 Edw. VII, 1910, c. 17); An Act to amend the Navigable Waters Protection Act (9-10 Edw. VII, 1910, c. 44); An Act to authorize the payment of a subsidy to the Collingwood Shipbuilding Co., Ltd., (2 Geo. V, 1912, c. 17); An Act to amend the Dry Dock Subsidies Act, 1910 (2 Geo. V, 1912, c. 20); An Act to amend the Government Works Toll Act, R.S.C., 1906, c. 40, (2 Geo. V, 1912, c. 26); An Act to incorporate the National Gallery of Canada (3-4 Geo. V, 1913, c. 33); An Act to authorize the payment of a subsidy to the Western Dry



Dock and Shipbuilding Co., Ltd., (3-4 Geo. V, 1913, c. 57); Acts to amend the Dry Dock Subsidies Act, 1910 (4-5 Geo. V, 1914, c. 29, 7-8 Geo. V, 1917, c. 27 and 9-10 Geo. V, 1919, c. 51); Act to confirm an agreement between His Majesty the King and the Corporation of the City of Ottawa, (10-11 Geo. V, chap. 15); Ferries Act, R.S.C., 1906, c. 108; transferred by Order in Council 3rd June, 1918, for administration by Public Works Department.

**Trade and Commerce.**—Canada Grain; Electricity and Fluid Exportation; Electric Light Inspection; Electrical Units; Fertilizers; Gold and Silver Marking; Gas Inspection; Inspection and Sale; Inspection of Water Meters; Lead Bounties; Petroleum Bounty; Statistics; Timber Marking; Weights and Measures Inspection; Zinc Bounties.

**Labour.**—Conciliation and Labour (96); Industrial Disputes Investigation (6-7 Edw. VII, 1907, c. 20); Fair Wages Resolution of the House of Commons; Employment Offices Co-ordination Act (8-9 Geo. V, c. 21); The Technical Education Act (9-10 Geo. V, c. 73).

**Secretary of State.**—Companies; Naturalization; Canada Temperance; Boards of Trade; Trade Unions; War Charities, 1917.

**Naval Service.**—Naval Service (9-10 Edw. VII, 1910, c. 43); Naval Discipline (8-9 Geo. V, c. 34).

**Railways and Canals.**—Department of Railways and Canals (35); Government Railways (36); Intercolonial and P.E.I. Railway Employees' Provident Fund (6-7 Edw. VII, c. 22); The Government Railways Small Claims (9-10 Edw. VII, c. 26) and amendments to foregoing Acts; Acts to amend the National Transcontinental Railway Act (4-5 Geo. V, c. 43 and 5 Geo. V, c. 18) and to amend the Government Railway Act and authorize the purchase of certain Railways (5 Geo. V, c. 16); An Act to incorporate Canadian National Railway Company and respecting Canadian National Railways (9-10 Geo. V, c. 13) and amending Act, (10-11 Geo. V, c. 39); An Act to provide Compensation where employees of His Majesty are killed or suffer injuries while performing their duties (8-9 Geo. V, c. 15 and amending Act 9-10 Geo. V, c. 14); the Canada Highways Act (9-10 Geo. V, c. 54); the acquisition of the preference and common stock of the Grand Trunk Railway Company of Canada (10 Geo. V, c. 17, 10-11 Geo. V, c. 13 and 11-12 Geo. V, c. 9).

The Railway Act, 1919, (Companies) (9-10 Geo. V, c. 68) confers certain powers upon the Minister of the Department. In the case of subsidized Railways the authorizing Acts are carried out under the Department, which has also certain jurisdiction where Government guarantee has been given.

**Marine.**—Department of Marine and Fisheries; Government Vessels Discipline; Government Harbours and Piers; Canada Shipping and amending Acts (6-7 Geo. V, cc. 12 and 13); Navigable Waters Protection; Quebec Harbour and River Police; Live Stock Shipping; An Act to amend the Vancouver Harbour Commissioners' Act (6-7 Geo. V, c. 9); An Act transferring Rights and Powers in Harbour of St. John, N.B., to a Board of three Commissioners approved by Order in Council; The Vancouver Harbour Advances Act, 1919; An Act fixing the rate of interest to be paid on loans by His Majesty to the Harbour Commissioners of Montreal and Quebec; An Act to amend the Canada Shipping Act (Transfers and Mortgages of Ships), passed during session of 1919-20; Canada Shipping Acts (10-11 Geo. V, cc. 5, 6, 23, 38 and 70) relating respectively to certificates of service, steamboat inspection, pilotage, sick and diseased mariners and shipbuilding; An Act to extend the time for the payment of certain debentures issued by the Harbour Commissioners of Montreal (11-12 Geo. V, c. 11); an Act to amend the Canada Shipping Act (11-12 Geo. V, c. 19); an Act respecting the Lake of the Woods and other waters (11-12 Geo. V, c. 38).

**Indian Affairs.**—The Indian Act, 1906, with amendments to date.

**King's Printer and Controller of Stationery.**—Public Printing and Stationery (80) (10 Geo. V, c. 27, 1919).

**Mines.**—Geology and Mines (6-7 Edw. VII, 1907, c. 29); Explosives (4-5 Geo. V, 1914, c. 31).

**List of Principal Publications of the Departments of the Government of the Dominion of Canada, as compiled from information supplied by the respective Departments.**

**Customs and Inland Revenue.**—Annual Report containing Tables of Imports, Exports, Customs and Inland Revenue. Annual Report of Shipping.

**Post Office.**—Annual Report of the Postmaster General. Official Postal Guide. Regulations as to parcel post, rural mail delivery and government annuities.

**Agriculture.**—The Agricultural Gazette of Canada, subscription, \$1 per year (monthly). Annual Reports of the Minister, of the Experimental Farms and Stations, of the Dairy and Cold Storage Commissioner, of the Veterinary Director General and of the Entomological Branch. Bulletins, pamphlets, circulars and Seasonable Hints of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following nine divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botany; Poultry and Tobacco. Guides to the Experimental Farms and Stations. Bulletins of the Dairy and Cold Storage Branch relating to the history of the dairying and cold storage industry in Canada; the making of butter and cheese, cow testing, dairying experiments, co-operation, etc. Reports, bulletins, pamphlets, etc., of the Live Stock Branch, on cattle, sheep, swine, poultry, marketing of eggs, wool, etc. Bulletins of the Health of Animals Branch, with regulations as to contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; *maladie du coit*; tuberculosis; foot-and-mouth disease; quarantine and meat inspection. Bulletins and Reports of the Seed Branch as to Seed-testing, the production and use of seed grains and the Seed Control Act. Bulletins and circulars of the Entomological Branch and instructions to importers of nursery stock. Reports of the Canadian Seed Growers' Association. Fodder and Pasture Plants, by George H. Clark, B.S.A., and M. Oscar Malte, Ph.D., 143 pages, 27 plates, price 50 cents. Bulletin on the Maple Sugar Industry; Agricultural Instruction Act; Publications Filing System.

*Dominion Experimental Farms.*—(1) Report of the Director (contains summary of reports of Divisions, Farms and Stations); (2) Animal Husbandry Division; (3) Bee Division; (4) Botany division; (5) Chemistry Division; (6) Field Husbandry Division; (7) Illustration Stations Division; (8) Poultry Division; (9) Tobacco Division; Experimental Farm Reports; (10) Agassiz, B.C.; (11) Indian Head, Sask.; (12) Nappan, N.S.; Experimental Stations; (13) Charlottetown, P.E.I.; (14) Invermere, B.C.; (15) Kapuskasing, Ont. and la Ferme, Que.; (16) Kentville, N.S.; (17) Lennoxville, Que.; (18) Ste. Anne de la Pocatière, Que.; (19) Rosthern, Alta.; (20) Lethbridge, Alta.; (21) Lacombe, Alta.; (22) Summerland, B.C.; (23) Experimental Sub-stations: —Beaverlodge, Alta.; Fort Vermilion, Alta.; Grouard, Alta.; Fort Resolution, N.W.T.; Swede Creek, Yukon; Salmon Arm, B.C.

*Bulletins.*—(24) Bee diseases; (25) Beef Scrap versus Skim Milk for Egg Production; (26) Commercial Feeding Stuffs; (27) Fertilizers for Flowering Plants, Vegetables, Small Fruits and Lawns; (28) List of Publications; (29) Outlook for Dairying and Marketing of Dairy Produce; (30) Swine Husbandry in Canada (3rd Edition); (31) Why and How to Use Milk; (32) Crop Rotation; (33) Potato, its Cultivation and Varieties; (34) Smut, Seed Treatment for; (35) Corn Borer, the Control of; (36) Grasshoppers, The Control of; (37) Homes Beautiful, and How the Farmers May Make Them.

**NOTE**—The foregoing is a selection from the publications of the Department. A complete list of publications available for distribution is issued, and so long as the supply lasts copies of publications will be sent free on application to the Publications Branch, Department of Agriculture, Ottawa.

**Interior.**—Annual Report, including Reports from the Dominion Lands, Surveys, Dominion Parks, Forestry, Irrigation and Water Power Branches. Pamphlets, reports, bulletins etc., of the respective branches:—

*Topographical Surveys.*—(1) Annual Report of the Topographical Surveys Branch, and accompanying maps. Price 5c. (2) Manual of Instructions for the Survey of Dominion Lands. Price 50c. Supplement to the Manual. Price

50c. (3) Rules and Regulations of the Board of Examiners for Dominion Land Surveyors, and programme of the subjects of the various examinations. (4) The Selkirk Range (in two volumes), by A. O. WHEELER, F.R.G.S. Price \$1. (5) Copying Camera of the Surveyor General's Office. (6) Photographic Methods Employed by the Canadian Topographical Survey, by A. O. WHEELER, F.R.G.S. (7) Precise Measuring with Invar Wires and the Measurement of the Kootenay Base, by P. A. CARSON, D.L.S. (8) Report on Levelling Operations, from 1908 to 1914, by J. N. WALLACE, D.L.S. Price 35c. (9) Triangulation of Part of the Railway Belt of British Columbia, by H. PARRY, D.L.S. (10) Description, Adjustments and Methods of Use of the 6" Micrometer Block Survey Reiterating Transit Theodolite, by W. H. HERBERT, B.Sc. (11) Papers on Descriptions for Deeds. (12) Description of the townships surveyed in the different Provinces, issued yearly since 1909. (13) Description of the surveyed townships in the Peace River District. (14) Descriptions of lands comprised within the Fort Pitt Sectional Map, consisting of townships 49 to 56, ranges 15 to 28, west of the third meridian. (15) Description of Surveyed Lands in the Railway Belt of British Columbia (in three parts). (16) Extracts from Reports on townships east of the principal meridian, received from surveyors to July 1, 1914. (17) Extracts from Reports on townships 1 to 16 west of the principal meridian, received from surveyors to July 1, 1914. (18) Extracts from Reports on townships 17 to 32 west of the principal meridian, received from surveyors to July 1, 1914. (19) Extracts from Reports on townships 33 to 88 west of the principal meridian, received from surveyors to March 31, 1915. (20) Extracts from reports on townships 1 to 16 west of the second meridian received from surveyors to March 31, 1915. (21) Explanation of the Astronomical Field Tables for the use of the Land Surveyors of Canada. (22) Tests of small telescopes at the Laboratory of the Dominion Lands Survey. (23) Alberta and British Columbia Boundary, Part 1, 1913 to 1916, Price 50c. Report and Atlas, \$1. (24) Description of, and Guide to Jasper Park, 50 cents. (25) The Testing of Aneroid Barometers at the Laboratory of the Dominion Lands Survey. (26) Testing of time-pieces at the Laboratory of the Dominion Lands Survey. (27) Description of Boundary Monuments erected on surveys of Dominion Lands 1871-1917, by H. L. SEYMOUR, D.L.S.; (28) Standardization of Measures of length at the Laboratory of the Dominion Lands Surveys; (29) The Testing of Thermometers at the Laboratory of the Dominion Lands Surveys; (30) Drought and summer frosts in Western Canada, by W. H. HERBERT, B.Sc.; (31) Descriptions of townships between the third and fourth meridians, 1886; (32) Descriptions of the townships west of the fourth and fifth meridians, 1886.

*Maps.*—(33) Township Plans, Price 10c. (34) Plans of Parishes, Townplots and Settlements, 25c to \$1.00; (35) Sectional maps of Western Provinces and Yukon Territory, price 5c; (36) New style sectional maps in greater detail showing roads, telephones, buildings, price 25c; (37) Mount Robson and mountains north of Yellowhead pass; (38) Banff and vicinity; (39) Central part of Jasper Park in 6 sheets, price 15c per sheet; (40) Map of the same area in 1 sheet; (41) Crownsnest forest and Waterton Lakes Park in 5 sheets; (42) Waterton Lakes Park; (43) Magnetic maps; (44) Alberta—British Columbia boundary maps, 10c per sheet; (45) Land classification maps of Peace river, St. Paul de Metis, and Prince Albert districts; (46) Mining districts of Rice lake, price 5c., and Flinflon lake, price 15c. (47) Northern Selkirk mountains and the Big Bend of the Columbia; (48) Mackenzie and Slave rivers. (Publications of the Topographical Surveys Branch may be obtained on application to the Distribution Office, Department of Public Printing and Stationery for No. 1: to the Secretary, Board of Examiners for Dominion Land Surveyors, for No. 3, and to the Surveyor General for the other Nos.)

*Dominion Observatory.*—Observations of Dominion Observatory, Vol. 4: No. 14, Orbit of the Spectroscopic Binary Boss 3511, by W. E. HARPER, M.A.; No. 15, Orbit of the Spectroscopic Binary 19 Lyncis, by W. E. HARPER; No. 16, Orbit of the Spectroscopic Binary  $\eta$  Draconis, by W. E. HARPER; No. 17, Measures of the Radial Velocities of Fourteen Stars, by J. B. CANNON, M.A.; No. 18, The New Star in the Constellation Aquila, by W. E. HARPER; No. 19, Geminorum, A Long Period Binary, by W. E. HARPER; No. 20, Measures of Radial Velocity of 23 Comae Berenices, Serpentes and Serpentes, by W. E. HARPER; No. 21, Measures of Radial Velocity of Cassiopeiae, Persei, 69 Tauri and Cygni, by W. E. HARPER; No. 22, Radial Velocities of 30 Stars, by W. E. HARPER. Vol. 5, No. 1, A Spectrographic



Study of Early Class B Stars, by F. HENROTEAU, Ph.D., and J. P. HENDERSON, M.A. Publications of the Dominion Observatory, Vol. V, No. 2, the Effect of Cooling on a Cement Pier, by ERNEST A. HODGSON, M.A.; Vol. V, No. 3, A Spectroscopic Study of Early Class B Stars, Second Paper, by F. HENROTEAU, Ph.D.; Vol. V, No. 4. The Location of Epicenters, 1917-18, by ERNEST A. HODGSON, M.A.; Vol. V, No. 5, Magnetic Results, 1907-20, by C. A. FRENCH, M.A.; Vol. V, No. 6, Astronomical Positions in Canada, by R. MELDRUM STEWART, M.A.; Vol. V, No. 7, A Spectroscopic Study of Sigma Scorpii, by F. HENROTEAU, Ph.D. (See also 1919 Year Book, pp. 630-631.)

*Reclamation.*—Irrigation Reports of Irrigation Surveys and Inspections, 1915 to 1920-21; Annual Stream Measurements Reports, 1909 to 1919. Report of the Western Canada Irrigation Association Conventions (1st to 11th Convention); Report of the International Irrigation Congress, 1914. Bulletins; (1) Irrigation in Saskatchewan and Alberta; (2) Alfalfa Culture; (3) Climatic and Soil Conditions in C. P. Ry. Co's Irrigation Block; (4) Duty of Water Experiments and Farm Demonstration Work; (5) Farm Water Supply. Pamphlets; Address by Mr S. G. PORTER on "Practical Operation of Irrigation Works." Address by Dr. RUTHERFORD on "Inter-dependence of Farm and City." Addresses by Mr. DON H. BARK on "The Actual Problem that confronts the Irrigator," "Practical Irrigation Hints for Alberta," and "Alfalfa Growing."

*Dominion Water Powers.*—Annual Reports for 1912-13 to 1919-21. The Annual Reports of the Branch previous to 1913 are included in the Annual Report of the Department. Water Resources Papers; (1) Report of the Railway Belt Hydrometric Survey for 1911-12, by P. A. CARSON; (2) Report of Bow River Power and Storage Investigations, by M. C. HENDRY; (3) Report on Power and Storage Investigations, Winnipeg River, by J. T. JOHNSTON; (4, 19, 22, 24 and 26) Annual Reports of the Manitoba Hydrometric Survey for 1912 to 1919, by M. C. HENDRY (to 1918), and by C. H. ATTWOOD, (1919); (5 and 11) Preliminary and final Report on the Pasquia Reclamation Project, by T. H. DUNN; (6) Report on Cost on Various Sources of Power for Pumping in connection with South Saskatchewan Water Supply Diversion Project, by H. E. M. KENSIT; (7) Report on the Manitoba Water Powers, by D. L. MCLEAN, S. S. SCOVIL and J. T. JOHNSTON; (8, 14, 18, 21, 23 and 25) Annual Reports of the British Columbia Hydrometric Survey for 1913 to 1919, R. G. SWAN; (10) General Guide for Compilation of Water Power Reports of Dominion Water Power Branch, prepared by J. T. JOHNSTON; (12) Report on Small Water Powers in Western Canada and Discussions of Sources of Power for the Farm, by A. M. BEALE; (13) Reports on the Coquitlam-Bountzen Hydro-Electric Development, by G. R. G. CONWAY; (16) Report of the Water Powers of Canada. A series of five pamphlets prepared for distribution at the Panama-Pacific Exposition, 1915, by G. R. G. CONWAY, P. H. MITCHELL, H. G. ACRES, F. T. KAELIN and K. H. SMITH; (17) Canadian Hydraulic Power Development and Electric Power in Canadian Industry, by C. H. MITCHELL; (20) Report on the interests dependent on Winnipeg River Power, with special reference to the capital invested and the labour employed, by H. E. M. KENSIT; (27) Directory of Central Electric Stations in Canada, to Jan. 1, 1919, by J. T. JOHNSTON; (28) Report of the Dominion Hydrometric Survey covering St. Lawrence and southern Hudson Bay drainage in Ontario, 1919-20, by S. S. SCOVIL. (29) Report of the Dominion Hydrometric Survey covering the Atlantic drainage south of the St. Lawrence river, including Nova Scotia, New Brunswick, Prince Edward Island and southwestern Quebec, 1919-20, by K. H. SMITH; (30) Report of the Dominion Hydrometric Survey covering the Pacific drainage in British Columbia and the Yukon Territory, 1919-20, by R. G. SEVAN, continuation of the work contained in the Annual Reports of the British Columbia Hydrometric Survey; (31) Report of the Dominion Hydrometric Survey covering the Arctic and western Hudson Bay drainage (and Mississippi drainage in Canada) in Alberta, Saskatchewan, Manitoba, extreme western Ontario and the Northwest Territories 1919-20, by C. H. ATTWOOD and A. L. FORD, continues the work contained in Annual Reports of the Manitoba Hydrometric Survey; previous to 1919-20 Surveys in Alberta and Saskatchewan were carried on and published by the Reclamation Service, Department of the Interior.

*Natural Resources Intelligence.*—Maps: Northern Alberta, Southern Alberta, Saskatchewan and Manitoba Land Maps; Cereal Map of Manitoba, Saskatchewan and Alberta; Small Land Map of Manitoba, Saskatchewan and Alberta; Bank Map



of Manitoba, Saskatchewan and Alberta; Bank Map of Ontario and Quebec; Land Registration and Judicial Districts Map of Manitoba, Saskatchewan and Alberta; Resource Maps of Canada, Land District Map of Northern Alberta. Reports: The Unexploited West; Preparing Land for Grain Crops on the Prairies; Handbook for the Information of Intending Settlers; The Lower Athabaska and Slave River District; The Peace River District—Its Resources and Opportunities; The New Manitoba District—a Description of the Resources and Development of the New Mining District of Northern Manitoba; Athabaska to the Bay; The Province of Saskatchewan—a Description of the Resources, Development and Possibilities of the Province; Manitoba, Saskatchewan and Alberta Natural Resources—a Compilation Bearing on the Natural Resources of the Three Provinces; Supplement to Cereal Maps; Facts Regarding the Dominion; Lists of Unoccupied and Uncultivated Lands in Manitoba, Saskatchewan, Alberta, Nova Scotia, New Brunswick and Prince Edward Island; Oil and Gas in Western Canada; Central British Columbia; The Province of New Brunswick; The Natural Resources of Nova Scotia; New Oil Fields of Northern Canada.

*Mining Lands and Yukon.*—The Yukon Territory, its History and Resources; A two sheet map of Alberta, showing the coal mining rights disposed of; Yukon Placer Mining Act; Yukon Act; Yukon Land Regulations; Yukon Homestead Regulations; Yukon Timber Regulations; Yukon Grazing and Hay Regulations; Quartz Mining Regulations; Coal Mining Regulations; Placer Mining Regulations; Quarrying Regulations; Petroleum and Natural Gas Regulations; Potash Regulations; Dredging Regulations relating to the Yukon Territory; Dredging Regulations relating to beds of rivers outside of the Yukon Territory; Regulations relating to bar-digging on the North Saskatchewan River; Regulations for the issue of oil and gas permits in the Northwest Territories; Alkali Mining Regulations; Regulations for the issue of permits to mine coal for domestic purposes; Regulations for the issue of permits to remove sand stone and gravel from the beds of rivers and lakes.

*Dominion Parks.*—A Sprig of Mountain Heather; Glaciers of the Rockies and Selkirks; Classified Guide to Fish and their Habitat in the Rocky Mountains Park; The Nakimu Caves; Guide to the Geology of the Canadian National Park on the C.P.R. between Calgary and Revelstoke; Handbook to the Rocky Mountains Park Museum; Livery Tariff for Rocky Mountains Park; Livery Tariff for Yoho Valley; Map of Rocky Mountains Park; Map of Yoho Park; Map of Glacier Park; Map of Revelstoke Park; Map of Buffalo Park; Map of Banff and Vicinity; Through the Heart of the Rockies and Selkirks; Automobile Tariff for Rocky Mountains Park; Automobile Tariff for Yoho Park; Livery Tariff for Glacier Park; Map of Central Part of Jasper Park; Map of Waterton Lakes Park; Migratory Birds Convention Act; Canada's Feathered Friends; No Spring Shooting means more Migratory Game; Protection of Bird Neighbours; Birds of a Manitoba Garden; Birds a National Asset; Bird Houses and their Occupants; Les Oiseaux Amis du Canada; La Prohibition de la Chasse au Printemps assure une plus grande quantité de Gibier Migrateur; La Bernache Commune de la Côte de l'Atlantique; Les Oiseaux Sauvages; Les Ministres de l'Agriculture donnent des Idées sur la Protection des Oiseaux; Les Oiseaux d'un Jardin manitobain.

*Forestry.*—Annual Reports of the Director of Forestry, 1914 to 1920, inclusive. Bulletins (where number and title are omitted, the document is out of print): (1) Tree Planting on the Prairies; (11) Forest Products of Canada, 1909; Lumber, Square Timber, Lath and Shingles; (14) Cross-ties purchased; (22) Cross-ties; (23) Timber used in Mining Operations; (27) Forest Products of Canada, 1910; Coöperage; Forest Products of Canada, 1911; (34) Lumber, Square Timber, Lath and Shingles; (35) Poles and Cross-ties; (36) Wood-using Industries of Ontario; Forest Products of Canada, 1912; (38) Pulpwood; (39) Poles and Ties; Forest Products of Canada, 1913; (46) Pulpwood Consumption; (48) Lumber, Lath and Shingles; (49) Treated Wood-block Paving; (51) Game Preservation in the Rocky Mountains Forest Reserve; (52) Forest Products of Canada, 1913 (being Nos. 46, 47 and 48); (53) Timber Conditions in the Smoky River Valley and Grand-Prairie Country; Forest Products of Canada, 1914; (54) Pulpwood; Forest Products of Canada, 1915; (58a) Lumber, Lath and Shingles; (58b) Pulpwood; (58c) Poles and Cross-ties; (59) Canadian Woods for Structural Timbers; (60) Canadian Douglas Fir: its mechanical and physical properties; (61) Native Trees of Canada (price

50 cents); (63) Wood-using Industries of Quebec; (65) Forest Products of Canada, 1917; Poles and Cross-ties; (66) Utilization of Waste Sulphite Liquor (price 50 cents); (67) Creosote Treatment of Jack Pine and Eastern Hemlock for Cross-ties; (68) Forest Fires in Canada, 1917; (69) Care of the Wood Lot; (70) Forest Fires in Canada, 1918; (71) Canadian Sitka Spruce; its mechanical and physical properties. Circulars: (5) Planning a Tree Plantation for a Prairie Homestead; (6) Preservative Treatment of Fence-posts; (8) The Forest Products Laboratories; (9) Chemical Methods for Utilizing Wood Wastes; (12) The Empire Timber Exhibition Manual Methods of Communication Adapted to Forest Protection (price one dollar, post free); Dominion Forestry Branch Message Code (price 10 cents post free).

**Northwest Territories.**—Northwest Territories Act; Northwest Territories Game Act; Migratory Birds Convention Act; Northwest Territories Timber Regulations; Northwest Territories Hay and Grazing Regulations; Yukon Territory, its History and Resources; Yukon Act; Yukon Land Regulations; Yukon Homestead Regulations; Yukon Hay and Grazing Regulations; Northwest Territories Oil and Gas Regulations.

**Immigration and Colonization.**—Atlas of Canada, United Kingdom and United States editions. Eastern Canada, United Kingdom and United States editions. Canada West, United Kingdom and United States editions. Immigration Facts and Figures. Report of the Chief Inspector of British Immigrant Children. Immigration Act and Regulations. A Manual of Citizenship. Annual Report.

**Finance.**—Annual Reports of the Public Accounts of the Dominion of Canada. Monthly Statements of the Chartered Banks of Canada. Estimates.

**Insurance.**—Quarterly Statement of List of Licensed Companies. Annual Abstract of Statements of Insurance Companies in Canada (subject to correction). Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies). Annual List of Securities held by Insurance Companies in Canada with Department's Valuation thereof.

**Militia and Defence.**—Annual Report. Militia List. Militia Orders. General Orders.

**Trade and Commerce.**—Annual Report. Annual Report *re* Mail Subsidies and Steamship Subventions. Annual Report of Board of Grain Commissioners for Canada. Rules and Regulations made by Board of Grain Commissioners. (Annual) List of Licensed Elevators, etc. (Annual) Grain Inspection in Canada, (1914). Weekly Bulletin containing Reports of Trade Commissioners and other Commercial Information. Handbook for Export to South America (1915). Trade with China and Japan (1914). Export Directory of Canada (1915). Russian Trade (1916). The German War and its relations to Canadian Trade (1914). Toy-making in Canada (1916). The Timber Import Trade of Australia (1917). Trial Shipments of Wheat from Vancouver via the Panama Canal to the United Kingdom. Barbados, Preferential Tariff of. Canadian Economic Commission to Siberia (1919). Canada-West Indies Conference (1920). Dominion Grain Research Laboratory (1920). Electrical Standards and their application to trade and commerce. Mexico as a field for Exports (1921). Motion Pictures, Catalogue of. Report of Special Trade Commission to Great Britain, France and Italy—French and English (1916). Rules and Forms of the Canadian Patent Office. Trade after the War (1916). Trade of the New Countries of South East Europe (1921). Trade between Canada and the British West India Colonies (1920). West Africa and its Opportunities for Canadian Trade (1921).

**Publications of the Dominion Bureau of Statistics.**—For the publications of the Bureau, covering the field of Canadian statistics, see pages 831-834.

**Labour.**—Monthly: The Labour Gazette (published in English and French at the nominal subscription price of 20 cents per annum, averaging over 100 pages.) Annually: Report of the Department of Labour. Report of Proceedings under the Industrial Disputes Investigations Act, 1907. Labour Organization in Canada, 1919 (a Report is published for each year about May or June). Special Reports: Strikes and Lockouts in Canada, 1901-1920 (to be published in January 1922).

Labour Legislation of Canada as existing December 31, 1920. (A Report on Labour Legislation is published annually in July or August.) Report of Proceedings under the Employment Offices Co-ordination Act; Report of Proceedings under the Technical Education Act.

**Secretary of State.**—Annual Report. Regulations and Despatches Respecting Extradition Proceedings. List of Companies Incorporated under the various Companies Acts of the Parliament of Canada from 1867 to December 31, 1913. Copies of Proclamations, Orders in Council and Documents relating to the European War. Method of conducting correspondence between the Dominion and Provincial Governments.

**Naval Service.**—Annual Report. Royal Naval College of Canada Calendar, containing general idea of scheme of training, prospects of cadets, regulations for entry, etc. Tidal and Current Survey: Tide Tables, published annually, for the East Coast, Pacific Coast, and Hudson Bay and Strait; also three abridged editions for St. Lawrence region, Bay of Fundy and Strait of Georgia. Currents in the Gulf of St. Lawrence, the entrance to the St. Lawrence, and the Southeast Coasts of Newfoundland and Belle Isle Strait. Tables of Currents in the Bay of Fundy. Tides at the head of the Bay of Fundy. Tide levels on the East Coast of Canada and Pacific Coast. Tides and Tidal Streams, a general explanation of the tides. Radiotelegraph Branch: Proceedings of the International Radiotelegraph Conference of London, 1912. Chart showing the Radiotelegraph stations in the Dominion of Canada. Postmaster General's Handbook for Radiotelegraph Operators (Instructions re handling of traffic, etc.). Hydrographic Survey: International Waterways Commission Report. Sailing Directions: St. Lawrence Pilot above Quebec; St. Lawrence Pilot below Quebec (English and French); Sailing Directions for the Canadian Shores of Lake Ontario; Canadian shores of Lake Huron and Georgian Bay; Sailing Directions for the Canadian Shores of Lake Superior. Charts: 34 charts of the St. Lawrence river between Pte. des Monts and Cornwall; Ottawa river: 2 sections covering Lake of Two Mountains; Lake Ontario: 11 coast charts with plans of harbours; Lake Erie: 2 sheets, plans of harbours and anchorages; Lake Huron: 6 coast charts; Georgian Bay 12 charts; North Channel of Lake Huron: 3 charts; Lake Superior: 12 coast charts; Lake Winnipeg: 2 charts; Pacific Coast in the vicinity of Prince Rupert and Queen Charlotte Islands: 11 charts; Atlantic Coast in the vicinity of Halifax Harbour, St John Harbour and Sydney: 7 charts; Hudson Bay: 7 charts; International Waterways Commission Boundary charts between St. Regis and Pigeon bay: 29 charts; Gulf of St. Lawrence in the vicinity of Port Borden and Bathurst: 2 charts; Gulf Telegraph chart of the gulf of St. Lawrence, lower St. Lawrence River to Montreal and Maritime Provinces showing the telegraph and telephone lines and stations, radio-telegraph, storm and marine signal stations, light-houses and fog alarms operated by or for the Government of Canada, the railway lines, submarine cables, tracks of vessels and tables of nautical distances: one chart; Charts of the St. Lawrence river between Cape Magdalen and Cornwall: 40 charts; the Saguenay river, vicinity of Chicoutimi: 1 chart; Lake of the Woods: 1 chart; Vicinity of Vancouver island and adjacent mainland: 4 charts.

**Railways and Canals.**—Annual Report of the Department.

**Board of Railway Commissioners for Canada.**—Annual Report.

**Marine.**—Marine Annual Report, containing Harbour Commissions, etc. Steamboat Inspection. List of Canadian Shipping. Reports of Expeditions to Hudson Bay, Northern Waters and Arctic Archipelago. Canadian Port Directory. List of Lights, etc., in Canada: (a) Pacific Coast; (b) Atlantic Coast; (c) Inland Waters.

**Indian Affairs.**—Annual Report. Indian Act, 1906, with Amendments to date. Schedule of Indian Reserves, 1913. Indian Treaties and Surrenders, Vols. I, II, III.

**King's Printer and Controller of Stationery.**—The Canada Gazette, published weekly by authority, with occasional supplements and extras, subscription, \$4 per annum payable in advance, single copies, 10 cents each. (Contains



weekly a list of current Government publications, as required by Order in Council 1,522). Judgments of the Board of Railway Commissioners, bi-monthly, \$3 per annum; single copies, 20 cents; Exchequer Court Reports, \$4 per annum; Supreme Court Reports, \$3 per annum; Dominion Statutes, 1921, \$4. Acts Public and Private, with amendments to date, 5 cents to 75 cents a copy. Parliamentary Debates, "Hansard", issued daily during session, French and English, \$3 per session each for House of Commons and Senate Debates, single copies, 5 cents. Prices of blue-books are in nearly every case printed upon the front cover and are based practically on the cost of paper and presswork. They may be ordered direct from the Superintendent of Stationery, Department of Public Printing and Stationery, or through any bookseller in the Dominion.

**Mines.**—The Work of the Department of Mines, chiefly scientific and investigatory, is performed by the Department's four principal units, viz: the Geological Survey, Mines Branch, Victoria Memorial Museum Branch, and the Explosives Division.

The Geological Survey carries on areal and economic investigation and research work in mineralogy: the Mines Branch carries on field and laboratory investigations for the furtherance of the mining and metallurgical industries and the compilation of statistics and information relating to them; the Victoria Memorial Museum Branch carries on scientific investigations in anthropology, archæology, zoology and botany; and the Explosives Division, in the administration of the Explosives Act, 1914, has supervision of the manufacture, testing, storage and importation of explosives, and the issuing of licenses under the Act.

The Department of Mines publishes an annual report covering the activities of the whole Department as well as individual annual reports, covering the work of its branches.

*The Geological Survey Branch*, from 1842 to 1904, published annual volumes. From 1904 to 1910 upwards of 80 reports were issued, all separately. Since then, Memoirs to the number of 125, Bulletins numbering 33, and, in addition, miscellaneous publications of various kinds have been issued, including Geological Guide Books and Handbooks. The subjects dealt with include Areal and Economic Geology of particular districts, Mineralogy, Palæontology, Ornithology, Botany, Anthropology and related topics. In the future, publications on the last three subjects, namely, Ornithology, Botany and Anthropology, as well as all Biological papers, will be issued by the newly constituted *Victoria Memorial Museum Branch*.

*The Mines Branch*, from its beginning in 1908, has published annual reports of the Mineral Production and summary reports covering the investigations of the Metalliferous and Non-Metalliferous Mines Divisions, the Fuel Testing and Ore-Dressing Divisions, and the Ceramic, Road Materials and Chemical Divisions, and the operations of the Dominion Assay Office. Reports have been published, also dealing with the Technology of most of the economic minerals of Canada.

*The Explosives Division* has published annual reports since 1919.

The publications of the Department of Mines cover the Geology and Mineral Resources of the greater part of Canada. Most of the reports are available free of charge, or for a nominal price, on application to the Deputy Minister of Mines. Some of the reports may be had in French translations.

**Commission of Conservation.**—Annual Reports, 1910-19; Fire Waste in Canada, J. Grove Smith; Altitudes in Canada, James White, F.R.S.C., F.R.G.S.; Dictionary of Altitudes in Canada, James White, F.R.S.C., F.R.G.S. For the numerous other reports of the Commission of Conservation, see 1919 Canada Year Book, pp. 635-636.

**Advisory Council for Scientific and Industrial Research.**—Annual Reports of the Administrative Chairman, 1917-18, 1918-19, 1919-20 and 1920-21. *General Reports.*—(1) The Briquetting of Lignites, R. A. Ross, E.E.; (2) The Recovery of vapours from gases, Harold S. Davis, M.A., Ph.D., Mary Davidson Davis, B.A.; (3) The de-tarring of Gas by Electrical precipitation, J. G. Davidson, Ph.D.; (4) Nicotine and Tobacco Waste, A. D. Hone, M.A.; (5) Canadian Waste



Sulphite Liquor as a source of Alcohol, Vernon K. Kriebble, Asst. Prof., Dept. Chemistry, McGill University; (6) An Investigation into the Question of early Putrefaction of Eviscerated Fish in which the Gills have been left, Louis Gross, M.D.; (8) A Method of Smelting Titaniferous Iron Ore, W. M. Goodwin, B.A., B.Sc.; (9) Food Requirements of the Ranch Fox, G. Ennis Smith B.A., B.Sc.; (10) Fuel Saving Possibilities in House Heating, L. M. Arkley, M.Sc., and James Govan. *Bulletins*: (1) The need for Industrial Research in Canada, Frank D. Adams, Sc.D., LL.D., F.R.S.; (2) Researches on Sound Measurement, Louis V. King, M.A., D.Sc., F.R.S.C.; (3) How to Handle Frozen Fish, E. E. Prince, D.Sc., LL.D.; (4) Hints on Frozen Fish, E. E. Prince, D.Sc., LL.D.; (5) Science and Industry, Prof. J. C. Fields, Ph.D., F.R.S.; (6) The Heating of Houses, Coal and Electricity compared, A. S. L. Barnes; (7) The manufacture of Ethyl Alcohol from Wood Waste, G. H. Tomlinson, B.A.; (8) Some Problems of the Fox Raising Industry, A. Hunter, M.A., B.Sc., M.B., Ch.B.; (9) The Honorary Advisory Council for Scientific and Industrial Research and its work, Frank D. Adams, Sc.D.; LL.D., F.R.S.; (10) A Plan for the Development of Industrial Research in Canada, R. F. Ruttan, B.A., M.D., D.Sc., F.R.S.C.

Copies of these Reports and Bulletins will be forwarded gratis to persons interested, upon request to the Secretary of the Council for Scientific and Industrial Research.

**Civil Service Commission.**—Annual Report, including lists of successful candidates in examinations, permanent appointments, promotions, and transfers and copies of examination papers set during the period covered by the Report. Regulations of the Civil Service Commission. General Information respecting Civil Service Examinations.

**Department of Health.**—"The Canadian Mother's Book"; General Venereal Disease Circular No. 1 to the Medical Profession of Canada: "Information concerning Venereal Disease"; General Venereal Disease Circular No. 2 to the Medical Profession of Canada: "Wassermann Test"; General Venereal Disease Circular No. 3 to the Medical Profession of Canada: "Microscopic Examination"; General Venereal Disease Circular No. 4 to the Medical Profession of Canada: "Diagnosis and Treatment of Venereal Disease"; General Venereal Disease Circular No. 1 to the Public: "Information for Men"; General Venereal Disease Circular No. 2 to the Public: "Information for Young Women"; General Venereal Disease Circular No. 3 to the Public: "Information for Parents". Little Blue Books; Home Series; (1) Good Wishes for you from Canada; (2) How to Build the Canadian House; (3) How to Make our Canadian Home; (4) How to Make Outpost Homes in Canada; (5) Canadians Need Milk; (6) How we Cook in Canada; (7) How to Manage Housework in Canada; (8) How to Take Care of Mother; (9) How to Take Care of the Family (10) How to Take Care of the Baby; (11) How to Take Care of the Children; (12) Household Cost Accounting in Canada; (13) How to Take Care of Household Waste; (14) How to Avoid Accidents and Give First Aid. All published in French and English.

**Other Departments.**—In addition to the publications above enumerated, Annual Reports are issued by the Department of Justice on the Penitentiaries of Canada, the Department of External Affairs, the Public Works and the Auditor General.

#### List of Principal Publications of the Provincial Governments of Canada, as compiled from information supplied by the respective Governments.

Note.—The numbers within brackets are the numbers of the Bulletins. The publications of the larger provinces are arranged by Departments.

#### PRINCE EDWARD ISLAND.

Journal of the Legislative Assembly. Statutes. General index to Statutes of P.E.I., 1869-1918. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts and of the Departments of Public Works, Education, Agriculture, Falconwood Hospital (for the Insane) and Vital Statistics.

## NOVA SCOTIA.

Royal Gazette. Statutes, Journals and Proceedings of Legislative Council. Journals and Proceedings of the House of Assembly. Journal of Education. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction, 1921. Annual Reports on Public Accounts, Vital Statistics, Statistics of Incorporated Towns and Municipalities, Public Health, Education, Industries and Immigration, Agriculture, Crown Lands, Mines, Subsidized Railways and other Public Works, Rural Telephones, Humane Institutions, Public Charities, including report of Hospital and Sanatorium, Penal Institutions, Neglected Children, Temperance, Publicity Printing, Legislative Library, Utility Board and Workmen's Compensation Board. Also Annual Reports of the Provincial Secretary, the Factory Inspector and of the Highway Board, Power Commission and Game Commissioners.

## NEW BRUNSWICK.

Royal Gazette. Statutes. Annual Reports of the Auditor General, of the Board of Health, of the Departments of Education and Agriculture (including Horticulture), Annual Reports on Public Works, Crown Lands, the Hospital for the Insane, the Factory Report, Report of the Jordan Memorial Tuberculosis Sanatorium at River Glade, Report of Women's Institutes, and Report of Chief Inspector under Prohibition Act, Report of the Workmen's Compensation Board. Official Year Book.

## QUEBEC.

Note.—The titles of publications available in the English language are printed in English.

**Attorney General.**—Annual Report of Prison Inspectors; Annual Report of Public Utilities Commission.

**Provincial Secretary.**—Annual Report of the Secretary and Registrar; Annual Report of the Superior Board of Health of the Province of Quebec; Statistical Year Book; Educational Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Judicial Statistics (annual); Statistics of the Penal Establishments (annual); Statistics of the Benevolent Institutions (annual); The Official Gazette (weekly); The Statutes of the Province (annual); Revised Statutes of the Province (1909); List of Municipal Corporations (annual).

**Treasury.**—Annual Statement of Public Accounts; Annual Estimates.

**Lands and Forests.**—Annual Report of the Minister; Surveyed Townships and Explored Territories, 1889; Richesse Forestière de la Province de Québec, J. C. Langelier, 1905; The Forest, Fernow, 1905; Arbres de Commerce de la Province de Québec, 1906; Table of Families of Twelve Children, Eugène Rouillard, 1904, 1906; Townships Surveyed and Territories Explored, 1908; List of Timber License Holders, 1911; Dictionnaire des Lacs et Rivières de la Province de Québec, Eugène Rouillard, 1914, Bulletin No. 1 of the Forestry Service; Table of Water Powers granted by the Province of Quebec, from 1st July, 1867, to 31st December, 1913, A. Amos; Bulletin No. 2 of the Forestry Service, Piché and Bédard, 1914; No. 1, La Rouille vesiculaire du Pin blanc, S.-C. Piché; The Water Powers in the Province of Quebec (Illustrated), 1917; Nomenclature of the Geographical Names in the Province of Quebec, Quebec Geographical Commission; Annual Report of the Quebec Streams Commission; Circulaire No. 3, Les Industries forestières de la Province de Québec, S.-C. Piché.

**Agriculture.**—Annual Reports: Department of Agriculture; Competition for Agricultural Merit; Dairymen's Association, Pomological Society; Journal of Agriculture and Horticulture, illustrated monthly. *Bulletins:* (1) Plans de fromageries et de beurreries; (2) Le Drainage Pratique, G. Michaud, 1914; (7) Le Cheval du Cultivateur, J. D. Duchene (French and English), 1914; (8) Culture des Céréales, Collège Macdonald, 1914; (14) La Culture du Trèfle; (15) La Culture du Blé-d'Inde Fourrager; (16) Guide de l'Arboriculteur; (18) Breeding and Preparing Bacon for the Market; (22) Des Bovidés; (24) The Great Fallacy of White Bread; (25) Etude Sommaire sur les Céréales; (29) Choix de la Semence; (39) Celery Culture; (40) How to Plant your Fruit Trees; (42) De la Protection des Plantes; (43) Bean

Culture; (44) Vegetable Culture (45) Liste des Présidents et Secrétaires des Sociétés Agricoles; (47) Le lapin; (48) Manuel de médecine Vétérinaire; (49) Home Canning of Fruit Products; (50) Sheep Raising for Profit in Quebec; (51) How to increase the Production of Pork; (52) Breeders' Guide of the Province of Quebec; (53) Le Fumier de Ferme—Composition— Valeur— Conservation; (55) L'élevage des volailles dans les Villes et les Villages; (56) De la Culture des Racines Fourragères; (57) Efficient Poultry Production in War-time; (58) How to save Meat; (61) Les engrais Chimiques et amendements; (62) Le Rucher québécois; (64) Traitements des semences; (65) Le Parantonnaire; (66) Comment et pourquoi produire des fraises; (67) Insects Nuisibles aux Animaux de la ferme; (69) Ennemis des jardins et vergers; (70) La rotation expliquée; (71) Le paiment du lait et de la crème. *Circulars*; (3) La Poule couveuse et les Poussins; (15) La Diarrhée chez les Poussins; (22) Concours d'Étables; (25) Culture du Maïs; (26) Comment économiser les Grains au Poulailier; (27) Calendrier d'Arrosage pour les Vergers; (28) Wheat Growing; (29) De la Culture de Seigle; (30) De la Culture de l'Orge; (31) De la Culture de l'Avoine; (32) De la Culture du Lin; (33) Pulvérisation pour les Vergers-Potagers; (35) Culture des Pois; (36) Culture des Haricots; (37) Potato Culture; (38) Calendrier général d'Arrosage; (39) Usage du Miel à la Maison; (40) Culture des Fleurs; (41) Pommes de terre à la cuisine.

#### **Roads.**—Annual Report of the Minister of Roads.

**Department of Colonization, Mines and Fisheries.**—Minéralogie pratique à l'usage des Prospecteurs, par J. Obalski (1910); The Fish and Game Clubs of the Province of Quebec, (1914); Fur Farming in the Province of Quebec, 1921; Mines and Minerals of the Province of Quebec, by Théo. C. Denis (1914); Iron ores of the Province of Quebec, by P. W. Dulieux (1915); Extracts from reports on the district of Ungava, by T. C. Denis (1915); Report on the Copper Deposits of the Eastern Townships, by J. Austen Bancroft (1916); L'industrie de l'amiante dans la province de Québec (1917); Guide du colon pour la région du Témiscamingue et de l'Abitibi, 1921; Guide du colon pour la région du Nord-Ouest de Montréal, et d'Ottawa, 1921; Guide du colon pour la région du Lac Saint-Jean, et de Chicoutimi, 1921; Guide du colon pour la région du Sud-Est de Québec, de Témiscouata à Gaspé, 1921; The Eastern Townships of Quebec, 1921.

#### **Department of Public Works and Labour.**—Minister's Report.

**Department of Public Instruction.**—Code scolaire (1919); Revised regulations of the Catholic Committee (1915); Regulations of the Protestant Committee (1909); Manuel des commissaires d'écoles, (1908); Education in the Province of Quebec, (1914); Protestant Rural Schools, (1912); Protestant Schools in the Eastern Townships (1913); Memoranda of Instructions to Teachers (1915); Annual report; Financial statement of the Superintendent of Public Instruction (annual); Mon premier livre (1st and 2nd part) (1900), a fresh edition of which is printed every year; L'Enseignement primaire; Educational Record; Yearly circulars containing instructions to school boards and school inspectors.

**Legislative Assembly.**—Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Returns to Orders and Addresses of the Legislative Assembly (Sessional Papers); Report of the Clerk of the Crown in Chancery on elections (published after every general election); Report of the Librarian of the Legislature; Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Government and Legislature; List of the Chairmen and Members of the Committees of the Legislative Assembly.

### **ONTARIO.**

**Premier.**—Report of the Hydro-Electric and Timiskaming and Northern Ontario Railway Commissions.

**Provincial Secretary.**—Annual Reports; Registrar General; Hospitals and Charitable Institutions; Hospitals for the Insane; Prisons and Reformatories; Institutions for the Feeble-minded and Epileptics; Neglected and Dependent Children. Digest of the Ontario Social Laws. Annual Report of the Secretary and Registrar of the Province of Ontario. Municipal Bulletin.



**Treasury.**—Annual Statements; Main, Supplementary and Further Supplementary Estimates of Expenditure; Public Accounts; Financial Statement of Treasurer delivered in the Legislative Assembly; Auditor's Report; Bureau of Archives Report; Statutes of the Province.

**Attorney General.**—Reports of Inspectors: Legal Offices; Registry Offices; Insurance; Division Courts. Annual Report of Board of License Commissioners.

**Registrar General.**—Vital Statistics Act. Act respecting the Solemnization of Marriage. Physicians' Pocket Reference to the International List of Causes of Death. Annual Report of Births, Marriages and Deaths.

**Department of Labour.**—Report of the Trades and Labour Department with Factory Inspector (Shops and Office Buildings), Chief Boiler Inspector, Inspector of Stationary Engineers and Bureau of Labour. Regulations of Boiler Inspection.

**Board of Health.**—Public Health Act; Vaccination Act; Venereal Diseases Act Regulations. Annual Report. Sewage Disposal for Residences. Facts about Flies, Mosquitoes, and How to Prevent them. "The Baby", monthly section in Public Health Journal. A simple Method of Water Purification. Simple Methods of House Ventilation in Winter. Regulations: Control of Communicable Disease; Slaughter Houses, etc.; Undertakers' Circulars; Prevention of Typhoid Fever; Anti-toxin, Vaccination, Smallpox, Measles, Typhoid Fever, Scarlet Fever, Diphtheria. Consumption (General), Venereal Diseases, Consumption (General Precautions), Consumption (Personal Precautions). Instructions on Disinfection. Leaflet containing Statistics respecting Waterworks and Sewage Systems. Regulations and Application Forms: Waterworks Approvals; Sewerage Approvals. Regulations Prevention of Babies' Sore Eyes; Model Milk By-law; Anterior Poliomyelitis; Combating Lousiness among Soldiers and Civilians, 1918; Prevention of Cancer; Hints for Farm Workers.

**Public Works.**—Annual Report of the Minister with reports of the Architect, Engineer, Statements of Law Clerk and Accountant. Report of Timiskaming and Northern Ontario Railway Commission. Report of the Queen Victoria Niagara Falls Park Commission.

**Department of Public Highways.**—Annual Report. (9) Report of the Ontario Highways Commission, 1914; (10) Regulations respecting Township Road Superintendents, 1916; (11) Regulations respecting County Roads, 1920 (14) Township Road Improvement, 1918; (15) The Motor Vehicles Act, The Highway Travel Act, The Load of Vehicles Act, The Public Vehicles Act, 1920; (16) General Specifications for Concrete Highway Bridges, 1917; (17) General Specifications for Steel Highway Bridges, 1917; (18) Highway Bridges, 1917; (19) General Plans for Steel Highway Bridges, 1917; (20) Description of Road Models Exhibit, 1917; (21) Short Forms for Bridge Tenders, 1917; (22) Report on Street Improvement, 1917; (23) Bituminous Surfaces for Macadam Roads, 1917; (24) Specifications for Bituminous Materials, 1917; (25) Country Road Legislation, as enacted by the Highways Improvement Act, the Ontario Highways Act, and the Obstructions on Highways Removal Act, 1920; (27) Widening the Provincial Highway, 1919; (28) Main Road Legislation, 1919; (29) Regulations respecting Township Roads, 1920; (30) Township Road Legislation as enacted by the Ontario Highways Act, 1920; (31) Motor Vehicle Headlamps.

**Department of Game and Fisheries.**—Annual Report. Game Laws.

**Lands and Forests.**—Annual Report of the Minister. Preliminary Statistics of Mineral Production, issued annually, also bulletins which are later incorporated in the Annual Report, issued in several parts, of the Department of Mines. Handbook of Northern Ontario on Colonization.

**Agriculture.**—*Annual Reports*; Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental Union; Dairymen's Associations; Live Stock Branch; Stallion Enrolment Board; Corn Growers' Association; Agricultural Statistics; Bee-Keepers' Association; Fruit Growers'



Association; Horticultural Experimental Station; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Women's Institutes. *Bulletins*: (174) Farm Underdrainage: Does it pay? (175) Farm Underdrainage Operations; (187), Codling Moth; (188) Weeds of Ontario; (194) Apple Orcharding; (198) Lime Sulphur Wash; (209) Farm Forestry; (210) Strawberries and Raspberries; (218) Birds of Ontario; (219) San Jose and Oyster Shell Scab; (220) Lightning Rods; (222) Currants and Gooseberries; (223) Fertilizers; (224) Greenhouse Construction; (225) Swine; (226) Plum Culture in Ontario; (229) Smuts and Rusts; (231) Vegetable Growing; (232) Field Beans; (237) The Grape in Ontario; (238) Lime and its use in Agriculture; (239) Potatoes; (240) Bacterial Diseases of Vegetables; (241) Peach Growing in Ontario; (242) Diseased Mouths a cause of Ill-Health; (243) Nature Study, or Stories in Agriculture; (244) Hints for Settlers in Northern Ontario; (247) Farm Poultry; (249) The Pear in Ontario (251) Insects affecting Vegetables; (253) Dairy Cattle; (254) War Breads; (255) Tuberculosis of Fowls; (256) Wintering Bees; (257) Diseases of Fruit Trees; (258) Diseases of Vegetables; (259) Books on Agriculture; (260) Experiments with Farm Crops; (261) Wheat and Rye; (262) Sugar Beets; (263) Mushrooms; (264) Diseases of Digestive Organs of Horses and Cattle; (265) Bacteria; (266) Cheese-making and Butter-making; (267) Farm Water Supply; (268) Farm Crops; Experiments at O.A.C.; (269) Hay and Pasture Crops, Grasses, Clovers, etc.; (270) Judging Vegetables; (271) The Apple Maggot; (272) Contagious Abortion in Cattle; (274) Sheep; (275) Farm Management, Part I; (276) Bee Diseases; (277) Motor Transportation in Rural Ontario; (278) Farm Management, Part II; (279) Community Halls; (280) Alfalfa; (281) Better Bulls; (282) Farm Management, Part III; (283) Sweet Clover. Publications of the Department are furnished free upon application to residents of Ontario. An average charge of 10 cents each for *Bulletins* and 15 cents each for *Reports* is made to persons living outside of Ontario.

**Education.**—Annual Report of the Minister of Education. Archæological Report. School Acts, 75 cents cloth boards, 50 cents paper. Regulations and Courses of Study: Public and Separate Schools; Continuation Schools; High Schools and Collegiate Institutes; Summer Courses and Examinations for Teachers; Summer Model Schools for Training of Teachers; Fall Model Schools for Training of Teachers; English-French Model Schools; Syllabus of Regulations and Normal School Courses for First and Second Class and Kindergarten Primary Certificates. Official Calendar of the Department of Education. Recommendations and Regulations for Industrial, Technical and Art Schools. Recommendations and Regulations for Commercial High Schools, etc. Recommendations and Regulations for Agriculture and Household Science Departments. Courses in History for Junior High School Entrance Examinations. Junior High School Entrance and Junior Public School Graduation Examination Instructions. Annual Departmental Examination Instructions. Literature Selections for Examinations. Regulations of the Consolidated Schools. The Consolidation of Rural Schools. Manuals; Teaching English to French-speaking pupils, 15 cents; Manual Training, 40 cents; Topics and Sub-Topics, 10 cents; Sewing, 20 cents; Sewing Charts, set of 10, \$2.00; Education Pamphlets; Visual Aids in Teaching of History; List of Reproductions of Works of Art; Sewing Chart, \$2; Mathematical Tables, 25 cents; Medical School Inspection. Regulations, Professional Courses and Examinations for Public School Inspectors' Certificates. Instructions to Public and Separate School Inspectors on Apportionment of Grants. Teachers' Institute Lectures and list of Lecturers and Subjects. Manual Training and Household Science in the High, Continuation, Public and Separate Schools. Catalogue of Books for Public and Separate School Libraries; Catalogue of Books for Continuation and High Schools and Collegiate Institutes. List of Public and Separate Schools and Teachers. Rural School Plans. Improvement of School Grounds. Annals of Valour, Canada's Part in the Present War. Jubilee of Confederation. Canadian Citizenship. Ontario Library Review (quarterly). The Great War in Verse and Prose, 20 cents. How the Fight was won, 20 cents. Geographical Changes, 15 cents. Canadian Girls at Work, \$1.25.

# MANITOBA.

**Agriculture.**—Annual Report. *Booklets:* Stock Raising in Manitoba; Opportunities in Manitoba; Meeting the Problems of Rural Life in Manitoba; Le Manitoba (French); Periodical Crop and Live Stock Reports; Map of the Province; Calendar of the Manitoba Agricultural College; Manitoba Agricultural Extension News (Monthly). *Bulletins:* Management of the Brood Mare and Foal; Canning by the Cold Pack Method; Common Diseases and Disorders of the Foal; Cheese Making on the Farm; Asparagus; Hatching, Brooding, Rearing and Feeding Chicks; Agricultural Society Activities; Farm Butter-making; Practical Cookery; Home Dressmaking; Observations on Rust Control; The Cream Separator on the Farm; Annual Pasture and Forage Crops for Manitoba; Rusts and Smuts of Grain Crops; Lessons in Millinery; Bee Keeping in Manitoba; Common Breeds of Poultry; Hand Selection and Harvesting of the Seed Plot; Rearing Dairy Calves; Birds in Relation to Agriculture; Laundering and Dyeing; Milk and Cream Testing on the Farm; The Manitoba Vegetable Garden; Clothing for the Family; Financing the Home; Colour and Design in Relation to Dress; Making Clothes Last Longer; Fattening, Killing, Dressing and Marketing Chickens; Debating Clubs; Silo Construction; Horses in Manitoba; Hay and Pasture Crops in Manitoba; The Farm Flock (Sheep). *Circulars:* The Farmers' Beef Ring; Barley Growing; Insect Poisons and Spray Mixtures; Blackleg—A Disease of Cattle; Summerfallow Competitions in Manitoba; Eggs from the Farm to the Consumer; How to Preserve Eggs; Cutworm Control; Back-Yard Poultry Keeping; Alfalfa Growing in Manitoba; Feeding for Winter Eggs; Potato Top Diseases in July and August; Standard for Judging Vegetables; The Western Wheat-Stem Sawfly; Chemistry of the Farm Water Supply.

**Education.**—Annual Report. Empire Day Booklet. Consolidation of Schools. Programme of Studies. Education among New Canadians. Municipal School Boards.

**Municipal Commissioner.**—Annual Report on Public Health. Statistical information respecting the Municipalities of the Province, with names and addresses of administration and health officials of each municipality.

**Public Works.**—Annual Report, including reports on Public Institutions.

**Attorney General.**—Annual Report, included in Sessional Papers. Annual Reports: Public Utilities Commission; Good Roads Commission; Government Telephone Commission.

**Provincial Treasurer.**—Public Accounts.

**Provincial Secretary.**—Annual Report.

**King's Printer.**—Manitoba Gazette. Report on Library and Museum. Journals and Sessional Papers. Statutes of the Province. List of Incorporated and Licensed Companies operating in Manitoba.

**Publicity Commissioner.**—Mining and Mineral Prospects in Northern Manitoba; Annual Report of Commissioner of Northern Manitoba; Mineral Prospects of South Eastern Manitoba.

# SASKATCHEWAN.

**Agriculture.**—Annual Report of the Department of Agriculture. Annual Reports of Branches, etc.: Dairy, Live Stock, Field Crops, Game, Statistics, Extension Department of College of Agriculture. Commission Reports: Elevator, Grain Markets, Agricultural Credit, Live Stock Marketing, Better Farming, Wheat Marketing. Bulletins and Leaflets on Live Stock, Field Crops, Dairying, Farm Buildings, Tillage Methods, etc.

**Other publications.**—Annual Reports: Department of Education; Bureau of Labour; Department of Public Works; Board of Highway Commissioners; Department of Municipal Affairs; Road Drag Competition; Department of the Provincial Secretary; Public Service Monthly; School Agriculture and Club Leader.

## ALBERTA.

**Agriculture.**—Farm Crops and Cultivation: Soil Cultivation; Seed, Preparation of Seed, Seeding; Suitable Varieties of Small Grains for Alberta; Winter Rye; The Production of Timothy Seed in Alberta; Potato Growing; Vegetable Gardening; The Storing of Roots; Weeds Poisonous to Live Stock; The Destruction of the Gopher; Live Stock and Poultry; Sheep in Alberta; Preparing for the Pig Crop; The Use of Pasture in Pig Raising; The Silo in Alberta; Successful Poultry Raising. Household Bulletins: Meat Curing on the Farm; A Talk about the Baby; Home Canning of Fruits, Vegetables and Meats; Home Drying of Fruits and Vegetables. Handbook of Alberta; Control of Grasshoppers in Alberta; The Housing of Swine; Calendar Provincial Schools of Agriculture; Opportunities in Alberta; Conservation of Soil Fertility and Soil Fibre; Alberta Game Laws.

**Department of Education.**—Public School Course of Study; Public School Leaving Examinations; Elementary Agriculture and Gardening; High School Course of Studies; Courses in Art and Manual Arts, IX, X, XI; Course in Agriculture, Grade XI; Course in Music for High Schools; Course in Household Economics for High Schools; Summer School Announcement; Course of Studies and Examinations for Commercial Diplomas; Normal School Announcement; Night Class Instruction in Mining Centres; Technical Education in Mining Centres; School Buildings in Rural and Village School Districts; 50 Facts about Education in Alberta; Rural School Lunches; The Certification of Teachers in Alberta; Syllabus of Physical Training for Schools; Second Annual Announcement of the Provincial Institute of Technology and Art; Specification for Teacher's Residence; Plans and Specifications (School Building Design "B"); Specification "B" (School Building Design); School Ordinance.

**Department of the Attorney General.**—Annual Report on Dependent and Delinquent Children.

**Treasury Department.**—Extracts from Public Accounts, 1920; Budget Speech, Provincial Treasurer, 1921; Financial and General Information Bulletin.

**Department of Public Works.**—Annual Report of Public Institutions; Annual Report of Public Works Department.

**Department of Municipal Affairs.**—Annual Report of Department; List of Alberta Municipalities.

**Department of Public Health.**—Annual Report of Department; Annual Report Vital Statistics. Bulletins issued monthly on various Health Subjects. Pamphlets regarding Infectious Diseases—Diphtheria; Scarlet Fever; Measles; Whooping Cough; Smallpox, etc. (in different languages).

Annual Reports are also issued by the following departments and branches: Provincial Secretary, Railways and Telephones, Treasury (Insurance Branch), Public Accounts, Board of Public Utilities, Agriculture.

## BRITISH COLUMBIA.

**Department of Lands.**—*General Bulletins:* (1) How to Pre-empt Land; (2) Some Questions and Answers regarding British Columbia; (3) British Columbia North of the C. P. Railway Belt; (4) Grazing Possibilities of British Columbia; (5) British Columbia South of the C. P. Railway Belt; (6) British Columbia Coast (Lower Mainland); (7) British Columbia Coast, Toba Inlet to Queen Charlotte Sd.; (8) British Columbia Coast, Queen Charlotte Sd. to Millbank Sd.; (9) British Columbia Coast, Millbank Sd. to Portland Canal; (10) Crown Lands, purchase and lease; (14) Vancouver Island; (15) Queen Charlotte Islands; (16) Cranbrook and Fernie Land Recording Division; (17) Yale and Similkameen Land Recording Division; (18) Osoyoos Land Recording Division; (19) Nicola Land Recording Division; (20) Nelson and Slokan Land Recording Division; (21) Revelstoke and Golden Land Recording Division; (23) Stikine and Atlin Land Recording Divisions; (24) Hazelton Land Recording Divisions; (25) Peace River—East of the Rocky Mountains; (26) Peace River—West of the Rocky Mountains; (27) New Westminster Land Recording Division; (28) François-Ootsea Lake; (29) Endako and Nechako Rivers; (30) Stuart and Babine Lakes. (31) Vicinity of the Pacific



Great Eastern Railway (Squamish to Clinton); (32) Vicinity of the Pacific Great Eastern Railway (Clinton to 52nd Parallel); (33) Central Lillooet Division; (34) The Chicotin Plateau; (35) Fort George Land Recording Division, Central and Western Portions; (36) Fort George Land Recording Division, Fraser River (south fork) and Canoe River. *Forest Branch*: (1) Barns, Combination and general purposes (1915); (2) Barns, Dairy, Ice, and Milk Houses (1915); (3) Barns, Beef Cattle (1915); (4) Barns, Horse (1915); (5) Barns, Sheep (1915); (6) Piggeries and Smoke Houses (1915); (7) Poultry Houses (1915); (8) Granaries; (8) Implement Sheds (1919); (9) Silos and Root Cellars (1915); (10) Farm Houses (1916); (12) How to Finish British Columbia Woods (1919); (19) B.C. Manufacturers of Forest Products; (21) Uses, Strengths, and Working Stresses of B. C. Timber (1920); (Q) What are your Needs? British Columbia Can Supply them; Woods to use; (T.S.) How to obtain a "Timber Sale." *Grazing Branch*: (1) Grazing Management of Crown Lands (1919); (2) Grazing Management of Crown Lands Range Allotment (1918); (3) Grazing Management of Crown Lands Co-operative (1919); (4) Grazing Possibilities of British Columbia (1920); (10) Regulations and Instructions for the Use of the Crown Ranges for Grazing Live Stock (1919).

**Department of Mines.**—Comprehensive Annual Reports obtainable on application to the Department of Mines.

**Department of Agriculture.**—*Reports and Miscellaneous*: (8) Agriculture in British Columbia; (26) Columbia-Kootenay Valley, (2nd edition); (27) Climate of British Columbia, (5th edition); (30) Guide to Bee-keeping; (59) Agricultural Statistics (1913); (65) Agricultural Statistics (1914); (76) Agricultural Statistics (1916); (88) Agricultural Statistics (1920); (83) Preservation of Food; (54) Women's Institute Handbook; Women's Institute Report (1914); Women's Institute Report (1915); Women's Institute Rules and Regulations; Farmers' Institute Annual Report (1915 and 1916); (85) Clearing Bush Lands; Farmers' Institute Advisory Agricultural Conference at Smithers; Farmers' Institute Rules and Regulations; (12) Proceedings of Entomological Society of British Columbia (1919); Agricultural Fairs Association Report (1918); Board of Horticulture Rules and Regulations (1919); Bee-keepers' Calendar for British Columbia (1920); Farm Account Book; Agricultural Department Annual; Reports, 1915, 1916, 1917 and 1920. List of Publications, Department of Agriculture; Agricultural Journal (Circulation 8,000. Published Monthly); Booklet on Aims and Objects of Farmers Institutes; Leaflet, Order in Council re Bounties. Opportunites in B.C. (1921 Edition); Poultry Breeders' Directory (No. X); Some Questions and Answers regarding British Columbia, (Revised Edition for Settlers); Stock-breeders Directory (No. X); Women's Institutes—Annual Reports, 1914 and 1915; Rules and Regulations. *Bulletins*: *Live Stock and Mixed Farming*.—(60) Hog-raising in British Columbia; (64) Goat-raising in British Columbia; (67) Feeding and Management of Dairy Cattle; (71) Butter-making on the Farm (2nd edition); (72) Milk-testing and Dairy Records; (73) Field Crop and Field Competition; (77) Sheep-raising; (78) Boys' and Girls' Competition, 1918; (79) Field-crop Competition (1918); (80) Management of Market Rabbits (2nd edition); (86) The Potato in British Columbia; (87) Fertilizers. *Poultry Raising, Etc.*—(26) Practical Poultry-raising (6th edition); (39) Natural and Artificial Brooding and Incubating (3rd edition); (49) Market Poultry (3rd edition); (74) Breeding and Selection of Commercial Poultry; (63) Poultry-house Construction. *Circular Bulletins*: (1) Thousand-headed Kale (2nd edition); (5) Clover-dodder; (10) Care of Milk and Cream; (13) Root-seed growing in British Columbia; (14) The Use of Agricultural Lime; (18) Noxious Weeds, their identification and eradication; (20) Seed-growers' Directory, 1917-18; (21) Silage aids Production; (22) Medical Inspection of Schools. *Agricultural Department Circulars*: (14) Community Breeding (2nd edition); (15) British Columbia Farmer and his Silo; (16) Clover and Alfalfa Seed Production in British Columbia, 1916; (22) City and Suburban Food Production; (24) Food for Young Children; (25) Food for Young Children; (26) Food for Young Children; (27) Hints to Exhibitors at Fall Fairs; (28) Hints to Exhibitors at Fall Fairs; (29) Hints to Exhibitors at Fall Fairs; (32) Potato Certification in British Columbia; (33) Vancouver Island and Gulf Islands; (34) Agriculture in West Kootenay; (35) How to Pack Nursery-Stock, etc.; (36) Preliminary Report of forty-five Dairy Farms at Chilliwack, etc.; (37) Some Good Egg Recipes; (38) Cost of Producing Apples in Okanagan Valley. *Horticultural Circulars*: (6) Spray Calendar



(Revised, 1920); (14) Practical Irrigation; (19) Propagation and Selection of Nursery Stock; (20) Orchard Cultivation and Cover-crops; (33) Fruit-growing Possibilities, Skeena River; (48) Exhibiting Fruits and Vegetables (2nd edition). *New Horticultural Series*: (31) Peach-twigg Borer; (32) Cabbage-root Maggot; (33) Strawberry-root Weevil; (34) The Woolly Aphid of the Apple; (35) Currant Gall-mite; (36) The Onion-thrips; (3rd edition); (37) The Imported Cabbage-worm; (38) The Lesser Apple Worm (2nd edition); (39) Apple-asphides; (40) Soap Solutions for Spraying (2nd edition); (41) The Oyster-shell scale; (42) Top working of Fruit Trees and Propagation; (43) Gardening on a City Lot; (44) Apple-scab; (45) Anthracnose; (46) Egg-plant and Pepper Growing in British Columbia Dry Belt; (47) Cucumber and Cantaloupe Growing in British Columbia; (48) Forcing Houses and Frames for producing Early Vegetable Plants; (49) Tomato-growing in British Columbia Dry Belt; (50) Potato-diseases; (51) Orchard Cover-crops; (52) Diseases of Stone-fruits in British Columbia; (53) Selection of Orchard Sites and Soils; (54) Loganberry Culture; (55) Raspberry Culture; (56) Currant and Gooseberry Culture (2nd edition); (60) Pruning Fruit Trees; (61) Making Lime-sulphur at Home (1920); (62) Planting Plans and Distances; (63) Locust control. *Poultry Circulars*: (2) Tuberculosis in Poultry; (4) Management of Turkeys (2nd edition); (11) Poultry-keeping on a City Lot (3rd edition); (12) Management of Geese; (15) Profitable Ducks; (19) Poultry Rations and their Practical Application (2nd edition); (24) Poultry-culling; (25) Hatching Hints; (26) Soil-contamination. *Dairy Circulars*.—(1) Starters for Farm Cheese-making; (2) Farm cheese; (3) Cottage cheese; (4) Clotted Cream.

Note.—Copies of the publications listed will be sent free of charge on application to the Publications Branch, Department of Agriculture, Victoria, B.C.

### YUKON TERRITORY.

Reports from the Gold Commissioner, and from the Crown Timber and Land Agent are contained in the Annual Report of the Department of the Interior, Ottawa. Pamphlet "Yukon Territory, Its History and Resources," published by the Department of the Interior.

## XIV.—LEGISLATION AND PRINCIPAL EVENTS OF THE YEAR 1921.

### DOMINION LEGISLATION, 1921.

The following are all the Acts of the fifth session of the thirteenth Parliament of Canada, begun and holden at Ottawa on February 14, 1921, and closed by prorogation on June 4, 1921. During the session 54 public general Acts and 144 local and private Acts were passed. Of the latter 19 were railway and bridge companies' Acts, 4 were insurance companies' Acts, 10 were other companies' Acts and 111 were divorce Acts.

**Finance.**—Two Appropriation Acts were passed during the session, chapters 2 and 54, the former relating to the fiscal year 1922 and the latter to the fiscal years 1921 and 1922. The total sum appropriated was \$440,981,675 for the fiscal year 1922, and \$14,681,810 for the fiscal year 1921. Among the larger appropriations for 1921-1922 were \$30,530,359 for war and active militia pensions, loans of \$50,000,000, \$89,687,633 and \$26,000,000 to railways, \$35,000,000 as advances to soldiers settling upon the land and cost of administering the Soldiers' Settlement Act, \$13,900,370 as loans to Provincial Governments for housing and \$7,000,000 to make good the deficit on the Canadian Government Railways up to the end of 1921.

By chapter 33, the Income War Tax Act of 1917 is amended by providing that persons failing to deliver a return of income within the prescribed time shall be liable to a penalty of 5 p.c. of the tax payable by them, but not to exceed \$500; a penalty is also imposed for short payment, while it is also provided that the taxpayers shall receive a notice of assessment. By chapter 34, the excise duties on spirits are drastically increased from a basic rate of \$2.40 per proof gallon when made from raw grain, to a basic rate of \$9.00 per proof gallon, the old duties to be continued, however, in the case of spirits used by licensed manufacturers of patent and proprietary medicines, extracts, essences and pharmaceutical preparations. A drawback of 99 p. c. of the duty is allowed on limited quantities of spirits used for university, scientific or research purposes. Under chapter 50, an Act to amend the Special War Revenue Act, excise duties imposed in 1920 on a large variety of articles are repealed and others reduced, while the tax on sales imposed in 1920 is increased in the case of sales and deliveries by manufacturers and wholesalers or jobbers from 1 p.c. to  $1\frac{1}{2}$  p.c., and in the case of sales by manufacturers directly to retailers and consumers, from 2 p.c. to 3 p.c. Where goods are imported the rates under similar circumstances are increased from 2 p.c. to  $2\frac{1}{2}$  p.c. and 4 p.c. respectively.

**Agriculture.**—By chapter 5, the powers of the Canadian Wheat Board are continued in order that unsettled business may be concluded. By chapter 15, the operation of the Act of 1918 increasing compensation for animals slaughtered under the provisions of the Animal Contagious Diseases Act, is extended until 1924. By chapter 28, the grading of dairy produce is authorized. Chapter 35 imposes upon pressers of baled hay or straw instead of on vendors the obligation of stating the weight of bales, and chapter 41 permits until March 1, 1923, the manufacture, importation and sale of oleomargarine.

**Trade and Commerce.**—By chapter 8, the French Trade Agreement signed January 29, 1921, modifying the terms of the Convention of 1907, is approved, Canada granting to France, subject to the usual reservation in favour of other portions of the Empire, most favoured-nation treatment. Certain Canadian articles are removed from the operation of the French minimum tariff, while certain others are granted its privileges.

The West Indies Trade Agreement Act (c. 13) brings into force, so far as Canada is concerned, the provisions of the agreement made in 1920, providing for preferential customs duties and for improved steamship communication between Canada and the British West Indies, British Honduras and British Guiana. (See 1920 Year Book, p. 744).

The Winding-up Act was amended by chapter 14 in order to promote the securing of statistics of companies going into liquidation. The Bankruptcy Act was amended in numerous particulars by chapter 17, including provision for the appointment of a committee of creditors to administer or carry on the business of the debtor.

The authorized trustee is directed to insure the property of the debtor, and with the permission of the inspectors, may retain or disclaim leases. The administration of the Act is transferred from the Department of Secretary of State to the Department of Justice.

**Civil Service.**—By chapter 22, positions on government railways and ships are excluded from the operation of the Civil Service Act of 1918, and other positions may be so excluded where the Civil Service Commission considers this desirable; war pensioners are granted a special preference for employment in the Civil Service. Chapter 49 amends the Act of 1920 providing for the retirement of certain members of the public service, and extends the period when civil servants may be retired under it until July 1, 1922. Chapter 32 confirms certain appointments of officials made by the Minister of the Interior prior to May 24, 1918.

**Copyright.**—By the Copyright Act, (chapter 24), the law relating to copyright is consolidated and amended. The enactments, relating to copyright passed by the Parliament of the United Kingdom, so far as they apply to Canada, are repealed. The term of copyright is extended to cover the life-time of the author and for fifty years thereafter.

**Currency.**—By chapter 6, the Currency Act of 1910 is amended by providing for the issue of a nickel five-cent coin weighing 70 grains which shall be legal tender up to five dollars; the melting down of current legal tender gold coin, except under license from the Minister of Finance, is prohibited.

**Elections.**—Chapter 1 amends the Dominion Election Act with reference to the vote under the Canada Temperance Act in Ontario. By chapter 7, the statutes relating to corrupt practices at elections are amended. The Dominion Elections Act of 1920 is amended by chapter 29, defining as urban divisions those which contain 2,500 population instead of 1,000; hours of polling are to be from 8 a.m. to 6 p.m.; 14 days are uniformly to elapse between nomination and election.

**Health.**—By chapter 42, amending the Opium and Narcotic Drug Act, prescriptions for such drugs are not to be filled more than once, and are to be for medicinal purposes only; offences against the Act are made indictable offences.

**Justice.**—Under chapter 3, the Exchequer Court Act is amended to allow the Commissioner of Patents to appear before the Exchequer Court and to appeal to the Supreme Court of Canada against its decision. By chapter 18, amending the Canada Evidence Act, seven days is substituted for ten days as the period which must elapse between the production of documents to be used in a trial and the trial itself. By chapter 20, the omission of certain technicalities in the procedure under the Canada Temperance Act is not to defeat the general intention of the Act. An Act to amend the Criminal

Code (chapter 25) penalises the unlawful possession of bombs or grenades and prohibits aliens not having permits from possessing firearms or ammunition; driving an automobile while intoxicated is made an offence, and the theft of automobiles is made punishable by not less than a year's imprisonment. Whipping is added to the punishment for rape, for robbery, and for assault with intent to robbery. The conviction of a disorderly house is made *prima facie* evidence against frequenters. The Judges' Act is amended by chapter 36, which prescribes when judges are not to be paid travelling expenses. By Chapter 37 the Juvenile Delinquents' Act is amended by increasing the age limit within which delinquents are to be classed as juveniles from 16 to 18 years and by chapter 48 the Prisons and Reformatories Act is correspondingly amended. Chapter 46 authorizes the ratification of the Protocol of December 16, 1920, accepting the Statute for the Permanent Court of International Justice, provided for by Article 14 of the Covenant of the League of Nations.

**Immigration.**—By chapter 21, it is provided that Chinese desiring to enter Canada exempt from head tax are required to prove their status as men of science, merchants, teachers or students. The period during which Chinese who have once paid head tax and then returned to China may come back to Canada without paying additional head tax is extended from 12 months to 2 years. The prohibition of immigration of certain classes of persons contained in the Immigration Act is extended to cover Chinese of these classes. By chapter 32, amending the Immigration Act, the possession of a prescribed sum of money may be required, not only from immigrants, but from certain classes of non-immigrants desiring to enter Canada.

**Pensions.**—By chapter 45, the Pension Act is amended in various details, and the pensions paid to or in respect of members of Canadian Naval or Military Forces who were killed, died or were disabled on active service prior to the outbreak of the Great War, are raised, during the residence of the recipients in Canada, to the same rate as war pensions.

**Railways.**—By chapter 9, it is provided that the time for the award of the arbitrators in the Grand Trunk Railway arbitration may be extended by the Governor in Council. It also provides that the directors of the companies in the Grand Trunk System shall resign and be replaced by nominees of the Government, these to hold office during pleasure and have the powers assigned to the committee of management. A two years' extension of time for the completion of the St. John and Quebec Railways between Centreville and Andover, N.B., is granted by chapter 12.

**Returned Soldiers.**—The Returned Soldiers' Insurance Act of 1920 is amended by providing that of such insurance an amount not to exceed \$1,000 shall be paid on the death of the insured, the remainder to be paid to the beneficiary as a life annuity, an annuity certain for from 5 to 20 years, or as an annuity guaranteed for from 5 to 20 years, but payable thereafter during the life of the beneficiary.



In the case of unmarried insurers future wives and children shall have the first claim, but the insurers may name alternative beneficiaries (chapter 52).

**Shipping.**—By chapter 19, the penalty for breach of harbour regulations is increased.

**Miscellaneous.**—By chapter 4, a procedure is prescribed for the renunciation of Canadian nationality: chapter 10 establishes a Lake of the Woods Control Board, with authority to control in the most beneficial way the waters of the Winnipeg River, Lac Seul, the Lake of the Woods and other adjacent waters; chapter 11 extends the time for the payment of certain debentures issued by the Montreal Harbour Commission; chapter 16 provides for the observance of the Monday in the week of November 11 as Armistice and Thanksgiving Day; chapter 23 repeals the Conservation Act of 1909 and its amendments; chapter 26 constitutes a Department of Customs and Excise and also amends the Customs Act, providing that for the purpose of customs valuations, no reduction in excess of 50 per cent shall be allowed in the valuation of the currency of the country of export; chapter 31 consolidates the legislation relative to gas inspection; chapter 38 is an Act providing for the regulation of the Lake of the Woods and other adjacent waters; chapter 39 increases the penalty for violation of the Migratory Birds Convention Act; chapter 40 amends the Northwest Territories Act; chapter 43 amends the Ottawa Improvement Commission Act of 1919; chapter 44 amends the Patent Act; chapter 47 amends the Post Office Act by granting authority to establish a system of mail insurance, and by allowing unpaid as well as insufficiently paid letters to proceed to a Canadian destination charged with double postage; chapter 51 amends the Statistics Act by providing that certain schedules sent to a provincial Department under an arrangement between the Department and the Bureau of Statistics may be sent post free; chapter 53 amends the Royal Canadian Mounted Police Act with regard to the disposition of fines and forfeitures earned by members of the Force.

#### PROVINCIAL LEGISLATION, 1921.

NOTE.—Under each subject in the following summary of Provincial Legislation the provinces are taken in order from East to West. For convenience of reference names of provinces are printed in italics.

The following are all Acts of the Provincial Legislative Sessions held between January and June 1921: 11 Geo. V. (Prince Edward Island, New Brunswick, Quebec, Ontario, Manitoba, Alberta and British Columbia, (first session); 11-12 Geo. V. (Nova Scotia); between October and December, 1921: 12 Geo. V. (British Columbia, second session) and in November and December, 1920: 11 Geo. V. (Saskatchewan).

**Agencies.**—In *Prince Edward Island*, Chapter 11 requires the certification of fire insurance agents; Chapter 12 requires the certification of life insurance agents. In *Nova Scotia*, Chapter 14 requires that collecting agents be licensed; Chapter 67 amends the Act respecting insurance agents.

**Agriculture.**—In *Prince Edward Island*, by Chapter 5, the province accepts the aid offered by the Dominion under the Technical Education Act and otherwise provides for the maintenance and operation of the Provincial Agricultural and Technical School, which continues to be under the Department of Agriculture. In *New Brunswick*, Chapters 61, 62 and 63 legalize assistance to certain agricultural societies, the first by way of exempting debentures from taxation, the second and third by way of annual grants from the communities interested. In *Quebec*, Chapter 35 amends the Revised Statutes of 1909 respecting provincial competitions and distinctions for agricultural merit; Chapter 36 amends the same Statutes respecting agricultural societies; Chapter 37 revises the same statutes relating to the Dairy Association of the Province of Quebec, the inspection of butter and cheese factories and the manufacture of dairy products; Chapters 38 and 39 provide for the establishment and operation of demonstration farms and a provincial Dairy School; Chapter 40 establishes a basis of payment for milk and cream in food product factories; Chapter 41 relates to apiculture; Chapter 42 provides for the protection of thoroughbred cattle; Chapter 89 amends the provisions respecting the Agricultural and Horticultural Society of Montreal. In *Ontario*, Chapter 29 amends the Agricultural Associations Act; Chapter 30 amends the Agricultural Societies Act; Chapter 31 provides for financing agricultural development, empowering the Provincial Treasurer to borrow money at not more than 4 p.c. interest for the purpose of (a) loans to members of associations, (b) bonds or debentures under the Agricultural Development Act, (c) bonds or debentures of, or guaranteed by, the Dominion of Canada or any province of Canada, (d) bonds or debentures of, or guaranteed by, any municipality or school section in Ontario; Chapter 32 provides for the promotion of agricultural development, establishing and incorporating an Agricultural Development Board; Chapter 33 authorizes the formation of a Farm Loans Association for the purpose of making to its members short-term loans for specified agricultural purposes, and provides for provincial assistance to such association for securing capital. In *Manitoba*, Chapter 23 amends the Farm Loans Act of 7 Geo. V., especially by reducing the capital of the Association to \$550,000, raising the rate of interest on loans from 6 to 7 p.c. and on bonds from 5 to 6 p.c., also in other particulars, one of them relating to the holding of capital shares. In *Saskatchewan*, Chapter 49 amends the Agricultural Societies Act in respect to grants; Chapter 50 amends the Agricultural Co-operative Associations Act by legalizing the association of five or more persons as an incorporated association; Chapter 51 amends the Agricultural Aids Act; Chapter 52, the Stock Inspection Act; Chapter 53, the Horse Breeders' Act; Chapter 54, the Stray Animals Act; Chapters 55 and 56, the Saskatchewan Farm Loans Act, the first limiting loans to 50 p.c. of the board's valuation of the property offered as security, the second naming the commissioner as the managing member of the board and allowing him and the other members of the board remuneration; Chapter 57 amends the Farm Implement Act defining "large implements",

requiring a vendor under penalty to maintain a sufficient supply of repairs for machines supplied by him, empowering the Minister of Agriculture to appoint inspectors of stocks of repairs; Chapter 58 amends the Dairy Products Act, naming penalties for violation of the Act; Chapter 59 amends the Egg Marketing Act by forbidding the purchase for re-sale or sale of eggs unfit for human food. In *Alberta*, Chapter 47 amends the Live Stock Encouragement Act particularly by providing measures for security in the case of loans received by members of associations; Chapter 48 amends the Agricultural Societies Ordinance, one of the amendments being to the effect that no new society have its chief place of business within twenty-five miles of that of an existing society in the Province; Chapter 49 amends the Veterinary Act, some of the amendments giving certain powers to the Senate of the University controlling qualifications, etc. of veterinary doctors; Chapter 50 amends the Domestic Animals Act of 1920, particularly with reference to animals running at large and grazing on unfenced lands; Chapter 51 amends the Stallion Enrolment Act. In *British Columbia*, Chapter 2, first session, amends the Agricultural Act of 1915 by extending Farmers' Institutes privileges to associations or societies carrying on work of the same character as these institutes; Chapter 3 amends the Animals Act by prescribing a certain penalty for violation of subsection (1) of Section 3.

**Assessment.**—In *Prince Edward Island*, Chapter 1 amends the Road Act of 1920 by requiring a copy of assessment list to be furnished to the Commissioner of Public Works and by requiring the posting of three road tax notices in public places, which posting clears the overseer from issuing further notices; Chapter 2 rectifies defects, etc., in the proceedings under the Taxation Act of 1920, legalizes schedules, and declares all arrears of taxes under the Act recoverable. In *Nova Scotia*, Chapter 56 amends the Assessment Act of 1918 by requiring the levying of a poll tax of \$3.00 and not over \$5.00 on every male between 18 and 60 who is not otherwise assessed in the municipality, and of \$1.00 and not over \$3.00 on such person if he is otherwise assessed, and of 30 cents for the support of the poor upon every person over 21 years; Chapter 70 amends Chapter 62 of 1920 by stating that the latter Act does not repeal certain sections of the Assessment Act of 1918; Chapter 3 amends and consolidates Acts relating to the taxation of companies such as Banks, Insurance, Loan, Trust, Telegraph and Cable, Telephone, Gas and Electric Railway Companies, etc.; a public utility may earn 8 p.c. of the value of its property, assets and undertaking, but is taxed 50 p.c., on any amount over the 8 p.c.; a tax is also payable on paid up capital of incorporated companies; Chapter 54 amends the Land Tax Act of 1917 by fixing the value of assessable land, if not otherwise valued, at \$2 per acre. In *Ontario*, Chapter 67 amends Assessment Acts, one amendment being to the effect that agents, etc., of residents in Ontario are to forward statement of income of their principal; another amendment is to the effect that Court of Revision may order tenant to



pay taxes; Chapter 68 amends the Municipal Tax Exemption Act of 1920 with regard to votes, petitions and repeals in connection with by-laws; Chapter 69 amends the Statute Labour Act, allowing commutation of Statute Labour where approved by landholders; Chapter 12 amends the Corporations Tax Act affecting a tax on bank reserves, an additional tax on railways, increasing tax on telephone companies, etc.; Chapter 13 imposes a tax of 2 p.c. on transfers of land; Chapter 14 imposes a license upon billiard and pool rooms and bowling alleys; Chapter 11 amends the Mining Tax Act, especially in limiting deduction for municipal tax; Chapter 10 amends the Succession Duty Act in respect to rates of duty. In *Manitoba*, Chapter 1 amends the Amusements Taxation Act respecting the manner of collecting the penalty clause and by giving authority to the government for regulations respecting imposition of tax. In *Saskatchewan*, Chapter 23 amends the Wild Lands Tax Act in respect to equalization of the assessment by the Wild Lands Tax Commissioner; Chapter 22 amends the Succession Duty Act in respect to insurance moneys; Chapter 24 amends the Travelling Shows Act by fixing rates for licenses for such shows; Chapter 42 amends the Arrears of Tax Act with respect to land offered for sale for arrears of taxes, requiring proper publicity for such a sale; that land be not sold at such sale for less than the arrears, penalties, etc., and by giving the owner certain preferences over other bidders for such land. In *Alberta*, Chapter 25 amends 21 sections of the Tax Recovery Act of 1919: one protecting the rights of creditors in the case of lands sold for tax recovery; another regulating the disposal of the proceeds of such a sale; one important amendment is to the effect that in the case of sale for taxes the person or persons interested in the land shall be notified by registered mail and entitled to redeem it at the expiration of nine months from the date of sale, also that after the expiration of nine months a notice of sale shall be published in the *Alberta Gazette* and in a newspaper having general circulation in the municipality. In *British Columbia*, Chapter 63, first session, amends several sections of the Taxation Act; section 6 of the amendment requiring every person other than corporations, without any notice or demand, to make a return containing a statement of property or income; section 5 referring to depastured cattle, section 8 to procedure in case of returns received after compilation of assessment roll, section 9 to corporations assessment rolls, sections 11 and 25 to mines, sections 16, 23, 24 and 29 to date or procedure when taxes are due or delinquent, sections 18, 21 and 22 to assessment of corporations, section 28 to soldiers' taxes; Chapter 64 amends the Amusement Tax Act; Chapter 65 amends the Poll Tax Act.

**Buying and Selling.**—In *Prince Edward Island*, Chapter 11 requires the certification of fire insurance agents; Chapter 12 requires the certification of life insurance agents. In *Nova Scotia*, Chapter 14 requires that collecting agents be licensed; Chapter 67 amends the Act respecting insurance agents. In *Ontario*, Chapter 50 amends the Bills of Sale and Chattel Mortgage Act by exempting the Crown



from the provisions of the Act. In *Manitoba*, Chapter 5 legislates respecting the sale of goods in bulk, that is, a sale out of the ordinary course of business of the vendor or a sale of his entire stock or his interest in the business; the act requires that a statement be furnished to the purchaser, also that the vendor show at the time of the completion of the sale that the creditors are either paid in full or produce evidence of a waiver or consent by the creditors; unless the provisions of the Act are complied with, the sale is void against creditors. Chapter 9 amends "An Act respecting Contracts relating to Land" rendering certain provisions imperative after January 1, 1922. In *Saskatchewan*, Chapter 5 amends an Act respecting Lien Notes and Conditional Sales of Goods by repealing sections 3, 4 and 5. In *Alberta*, Chapter 12 is an Act to facilitate the sale of lands vested in the Crown in the right of the Province and authorizes a Minister to sell such land at public auction and to make regulations with respect to the conditions, of sale, selection and qualifications of auctioneers, etc., providing that such auctioneer shall not be required to obtain a license for the purpose of the sale.

**Child-Welfare.**—In *Nova Scotia*, Chapter 30 amends the Adoption of Children Act by legalizing adoption in certain cases on the written consent of the Superintendent of Neglected and Delinquent Children; Chapter 50 amends the Children's Protection Act, especially in respect to notification in cases of entry into and discharge from an institution. In *Quebec*, Chapter 86 amends the Statutes of 1909, respecting foundlings placed in the custody of certain institutions, by provisions in cases of children being entrusted to the custody of persons, etc.—these persons to guarantee suitable education under contract by which the institution may again take possession if deemed expedient. In *Ontario*, Chapter 55, an Act respecting the Adoption of Children, defines those who may apply for leave to adopt, the consent required and dispensed with, the conditions of prior residence, the rights of adopted child to inherit, the inheritance from adopted child, the rights of non-resident as to succession in Ontario and procedure in case of previous adoption; Chapter 53 deals with legitimation of children by the subsequent marriage of their parents; Chapter 54, an Act for the protection of illegitimate children, makes rigorous provision for the affiliation and support of such children by the parents. In *Alberta*, Chapter 20 to amend the Venereal Diseases Prevention Act affects Chapter 12 of 1909, being a Children's Protection Act. In *British Columbia*, Chapter 1 first session amends the Adoption Act in reference to the name taken by the adopted child.

**Civil Service Reform.**—In *Nova Scotia*, Chapters 24 and 25 amend the Public Service Act as amended in 1917. In *Quebec*, Chapter 19 amends the Revised Statutes relating to the Civil Service in respect to annual increases in the salaries of messengers; Chapter 20 makes certain provisions respecting the pensions of public officers belonging to the outside service; Chapter 21 authorizes the Government to take out group insurance policies on the lives of public

officers and employees; Chapter 22 amends the Act respecting the Quebec Public Service Commission, one of the amendments making special provisions as to pension of president of the Commission if he be not re-appointed. In *Ontario*, Chapter 3 amends the Ontario Public Service Superannuation Act, one amendment providing for a *per diem* allowance to members of the board; Chapter 5 creates the office of King's Printer. In *Saskatchewan*, Chapter 15 amends the Civil Service Act. In *Alberta*, Chapter 12 contains a section which confers certain powers upon the Deputy Minister of Municipal Affairs.

**Conservation and Production.**—In *Prince Edward Island*, Chapter 10 amends an Act to provide for the prevention and suppression of fires; Chapter 22 is an Act to promote sanitary conditions in fox ranches. In *Nova Scotia*, Chapter 2 amends and consolidates the acts for the preservation of game and the protection of woods against fires; Chapter 27 amends the Sheep Protection Act; Chapter 28 amends the Act respecting the improvement of dyked and marsh lands; Chapter 68 amends the Fire Prevention Act. In *New Brunswick*, Chapter 38 amends the Act respecting the protection of sheep from dogs; Chapter 10 provides for the prevention and suppression of fires; Chapter 16 relates to the storing of waters in rivers, streams and lakes; Chapter 33 amends the Forest Fires Act. In *Quebec*, Chapter 39 provides for the establishment and maintenance of a dairy school and intermediate agricultural schools; Chapter 42 relates to the protection of thoroughbred cattle; Chapter 43 requires the Minister to make from time to time lists of the public lands suitable for cultivation and also provides for the administration and sale of such lands; Chapter 44 amends the Quebec game laws. In *Ontario*, Chapter 18 provides for development work in Northern and Northwestern Ontario; Chapter 19 authorizes Minister to acquire lands for reforestation; Chapter 31 provides for the financing of agricultural development; Chapter 32 establishes a board for the promotion of agricultural development; Chapter 65 amends the Planning and Development Act; Chapter 66 provides for public improvements and services in certain suburban areas. In *Manitoba*, Chapter 24 amends the Fires Prevention Act of 1917 by providing that the penalty for not properly extinguishing a fire shall apply to any person who kindles or is a party to kindling a fire in the open air for camping, etc.; it also gives greater powers to the fire guardian in commanding the services of persons for fighting fires and in demanding information from travellers as to the location of their camps, etc.; Chapter 26 makes several amendments to the Game Protection Act with special reference to close seasons, use of dogs, putting out of poison, etc.; Chapter 66 amends the Sheep Protection Act with reference to notice to municipality in case of injury to sheep. In *Alberta*, Chapter 57 provides for the formation of drainage districts; by this Act, the Drainage Act of 1916 is repealed; the Act itself is in five parts, the first part dealing with organization, the second with elections, the third with the assessment roll, the fourth with expropriation of land

and the fifth with executions against districts; Chapter 59 provides for assistance to certain drainage districts; Chapter 60 amends the Reclamation Act; Chapter 62 amends the Irrigation Districts Act of 1920 in respect to organization of boards, procedure in passing by-laws, debentures, amalgamation of districts, etc.; Chapter 63 provides for assistance to the Lethbridge Northern Irrigation District. In *British Columbia*, Chapter 21 (first session) provides protection for breeders of goats and requires the use of pure-bred sires only; Chapter 72 (first session) amends the Water Act and deals mainly with the incorporation powers in, and management of, Improvement Districts.

**Co-operation.**—In *Nova Scotia*, Chapter 46 amends the Act to encourage the incorporation of Farmers' Co-operative Societies. In *Manitoba*, Chapter 10 amends the Co-operative Associations Act of 1916 in a number of details, the most important being the provision whereby any association may establish locals at any point in the province under such conditions as may be determined by by-law of the association; the provisions of the Co-operative Associations Act are made applicable to all co-operative associations carrying on business in the province, whether incorporated under this Act or not, and it is provided that all associations subject to this Act shall be also subject to the provisions of the Companies Act except where such provisions are inconsistent with this Act. In *Saskatchewan*, Chapter 9 amends an Act to incorporate The Saskatchewan Co-operative Creameries Limited by making the Sale of Shares Act non-applicable to this Act; Chapter 76 confirms an agreement with The Saskatchewan Co-operative Elevator Company, Limited. In *Alberta*, Chapter 35 amends the Alberta Co-operative Credit Act in respect to the payment of stocks, the management of the business of the society which is to be vested in a board of directors, the obligations of borrowers, the investing of paid-up capital, applications for loans, etc. In *British Columbia*, Chapter 9 of the second session deals with the disposition of profits under the Co-operative Associations Act.

**Corporations.**—In *Prince Edward Island*, twenty out of the thirty-five Acts were incorporation acts. In *Nova Scotia*, Chapter 15 was enacted to facilitate the incorporation of owners of vessels in the fishing industry; Chapters 36 and 37 amend the Act to facilitate the incorporation of Farmer's Fruit, Produce and Warehouse Associations; Chapters 39 and 40 amend the Domestic, Dominion and Foreign Corporations Act of 1912. In *New Brunswick*, Chapter 42 amends the Corporations Tax Act by imposing a tax of 1 p.c. upon the gross cash receipts of telegraph companies and a fixed tax upon extra-provincial corporations. In *Quebec*, Chapter 92 validates and provides for permits for certain acquisitions and alienations of immovable property by corporations and persons in mortmain. In *Ontario*, Chapter 12 amends the Corporation Tax Act by imposing taxes or additional taxes on bank reserves, railways, telephone companies, etc.; Chapter 58 amends the Ontario Companies Act by authorizing corporations to give power of attorney, to have official seal for use abroad which agents may be authorized to use; it also



requires an annual statement from every corporation; Chapter 59 amends the Timber Slide Companies Act; Chapter 61 amends the Loan and Trust Corporations Act by forbidding trust companies to borrow on debenture or by accepting deposits; it also deals with investment of funds received on guarantee receipts, securities allocated to guaranteed investments and quarterly returns as to guaranteed investments; it also authorizes a trust company to invest funds other than trust funds and to receive deposits which are to be deemed trust moneys and guaranteed; it also requires quarterly returns as to deposits from loan companies; it also empowers a company to have official seal for use abroad and to submit to inspection of its affairs. In *Saskatchewan*, Chapter 33 amends the Companies Act by requiring a company before registration to file a certified copy of its charter and by-laws, a petition and a statutory declaration; it also permits the adoption of the name of a defaulting company by another company. In *British Columbia*, Chapter 50 of the second session amends the Trustee Act by empowering trustees to expend any moneys of a trust estate or to borrow or raise moneys by mortgage upon such estate for repairs or improvements.

**Education.**—In *Prince Edward Island*, Chapter 3 amends the Public School Act of 1920 by defining "school age" as being from six to fifteen years inclusive, such age being attained at any time from July 1 to June 30; by empowering the Board of Education to make provision for medical inspection of schools, to appoint school health inspectors, fix their remuneration, make regulations respecting their qualifications, etc.; it repeals the provision made for the salaries of classroom assistants; it raises the attendance requirements, which entitle a teacher to the full government grant, from 50 to 60 p.c; it imposes a poll tax on every male resident, with certain exemptions, over twenty-one years of age; it extends the school franchise to women in the capacity of mothers to school children; it provides for grants for school equipment; for temporary licenses to teachers; fixes the age of compulsory attendance as between seven and thirteen during 60 p.c. of the school year and under penalty up to twenty dollars and increases the civic poll tax; Chapter 4 amends an Act to Amalgamate Prince of Wales College and Provincial Normal School, giving certain powers to the government respecting the appointment of staff and to the Board of Education to make regulations for said institution; Chapter 5 leaves the Provincial Agricultural and Technical School under the direction of the Commissioner of Agriculture and makes it the duty of the Chief Superintendent of Education to inspect said school; the officers of the school are to be appointed by the provincial government, which is also to be responsible for its maintenance and empowered to make regulations respecting courses, etc.; Chapter 6 amends the School Supplies Act by empowering the Board of Education to appoint or remove a manager of the business carried on under the provisions of the Act. In *Nova Scotia*, Chapter 59 amends the Education Act by a clause providing that one of the school trustees may be a poll tax payer or a woman; it also provides for a penalty of one cent



for each half day's absence of a child coming under compulsory regulations; Chapter 60 amends the Education Act by extending the rights and privileges of male poll tax payers to women qualified to vote under the Nova Scotia Franchise Act; Chapters 61 and 62 amend the Education Act, the latter chapter providing that the school fees and necessary travelling expenses of children compelled to attend another school on account of no school being provided in their own section shall be a charge on the defaulting school section. In *New Brunswick*, Chapter 22 amends the Schools Act, empowering certain cities and towns to make certain assessments; Chapter 23 extends certain powers to the Board of Education respecting normal school and staff; it also empowers the Chief Superintendent to allow \$100 for each department providing for retarded pupils and another \$100 to teachers taking special training for such work; in relation to Fredericton, Chapter 24 increases the amount for which debentures may be raised. In *Quebec*, Chapter 47 amends the Education Act, forbidding certain school corporations to let contracts without appropriation of funds, permitting special tax if no funds available, and the borrowing of money to carry out an Order of the Superior Board of Health; it also provides for pensions for officers of primary instruction; Chapter 3 authorizes grants of \$1,000,000 each to Laval and McGill Universities, payable by annual instalments of not more than \$200,000 each for purposes of education, and loans to provide the necessary funds; Chapter 39 provides for the establishment and maintenance of a provincial dairy school and of intermediate agricultural schools; Chapter 49 authorizes the Catholic School Commission of Montreal to issue bonds or debentures up to \$700,000 for school sites and buildings, enlarges the territory of the commission, defines the composition of corporation and provides for an endowment fund for teachers; Chapter 50 affects the Protestant School Commissioners of Montreal, apportioning certain amounts for the maintenance of schools under their control; Chapter 51 and 52 affect the School Commissioners of Quebec City and Sherbrooke; Chapter 53 amends the charter of the Polytechnic School, Chapter 54 of the Montreal School for Higher Commercial students, Chapter 55 of the Quebec Technical School; Chapter 153 provides for the incorporation of the Educational and Charitable Institute at Westmount. In *Ontario*, Chapter 89 amends the schools laws by defining what may be deemed rural public and separate schools, by guaranteeing payment of school debenture, by authorizing by-laws setting apart township school area with a board of five trustees; by requiring a county grant to continuation schools equal to the legislative grants; by permitting Union School section to become consolidated school section; Chapter 90 or The Vocational Education Act 1921 applies to all art, industrial and technical schools and departments, classified as (1) industrial, (2) Home-making, (3) Art, (4), Technical high, (5) Agriculture high and (6) Commercial high; the courses of instruction may include (1) General full-time day courses, (2) Special full-time day courses, (3) part-time day courses and (4) Evening school courses; the estimates of three committees having jurisdiction over this work shall

be included in the estimates submitted to the council of the municipality for the year; Chapter 91 amends the School Sites Act by enabling a board to take possession of a school site immediately after fulfilling the legal requirements, a judge being authorized to issue his warrant to the sheriff to deal with any opposition or resistance to the taking possession. In *Manitoba*, Chapter 49 amends the Public Schools Act by extending the powers of a rural municipality, by permitting a trustee in a consolidated school district to operate a van route or routes, by legalizing the making of a by-law to dissolve a municipal school district, by empowering trustees to supervise and direct sports and work during the vacation, and by many other alterations in sections; Chapter 50 further amends the School Act by allowing a municipal school board to add to the school levy up to five per cent to cover clerical work, etc.; Chapter 51 provides that in Brandon city the trustees be elected by electors generally instead of by wards as heretofore. In *Saskatchewan*, Chapter 44 amends the University Act in respect to amount received under the Succession Duty Act and to the subjects for anatomy; Chapter 45 amends the Secondary Education Act by repealing subsections referring to fees in high schools and to expulsion of pupils, by amending other sections referring to fees for secondary education and by providing for a grant of \$4 a day to a high school or collegiate institute for each teacher employed and of 15 cents per day for each non-resident pupil in actual attendance in classes above Grade VIII; Chapter 46 amends the School Act by repealing a subsection referring to powers of Superintendent of Education, by requiring that a nominee for office of trustee be able to read and write, by empowering trustees to provide noon lunch and to pay salary to teachers when sick under certain conditions; Chapter 47 provides for the payment of grants in support of elementary education to the extent of (1) in rural districts, \$1.50 for every teaching day a school is in operation and an additional sum of 60 cents the first year and 40 cents the second year a school is open, (2) in town districts \$1.50 for every teaching day open, but if the district maintains between 6 and 10 rooms the rate of grant shall be \$1.30 per day; between 11 and 25 rooms, \$1.10; over 25 rooms, 90 cents; (3) to every district maintaining a school exclusively for pupils above Grade VII, \$3 per day subject to certain conditions; (4) to every district providing noon lunch, 50 p.c. of initial cost of equipment; also it provides for science equipment, conveyance, night schools, teacher's residence and special grants; Chapter 48 amends the Education of Soldiers' Dependent Children Act by resident requirements and by making slight changes in the donation of assistance to education. In *Alberta*, Chapter 23 is a new Educational Tax Act replacing the Educational Tax Act of 1907; all land subject to seven exemptions within the province, not exempt from tax by the province, is assessed 3 mills on the dollar; grazing permits are taxed 1½ cents per acre; the minimum tax on land of over one acre in a subdivision is \$2.00 and less than one acre is 25 cents; the occupant of land exempt from taxation by the province is assessed 3 mills on the value of the land; Chapter 42 amends the School Grants

Act and the School Assessment Ordinance with reference to assessment and taxation in secondary consolidated school districts and by certain changes in the grants, including the giving of a grant of \$4 per day while open to each consolidated secondary school district with an average attendance of 15 pupils; Chapter 43 amends the School Ordinance by adding a section authorizing the organization of Secondary Consolidated Schools and one authorizing the Minister to appoint a Board of Conciliation to investigate disputes between teachers and boards of trustees. In *British Columbia*, Chapter 60, first session, provides the machinery for a superannuation system for school teachers as well as other employees.

**Elections.**—In *New Brunswick*, Chapter 46 changes electoral sub-districts in nine parishes. In *Ontario*, Chapter 2 is in reference to the preparation of voters' lists; Part I, showing all persons entitled to vote at municipal elections and elections to the Assembly, and Part II, showing all persons entitled to vote at municipal elections only, are required to be printed and revised by county judge. In *Manitoba*, Chapters 17 and 18 amend the Manitoba Election Act particularly in reference to regulations under proportional representation and voters' lists; Chapters 19 and 20 amend the Electoral Divisions Act in reference to certain electoral divisions. In *Saskatchewan*, Chapter 13 amends the Legislative Assembly Act by giving two members to each of the cities of Moosejaw, Regina and Saskatoon and by defining the boundaries of different electoral divisions; Chapter 14 amends the Saskatchewan Election Act, amending sections 7, 13, 158, 176, 194, 226 and forms 40 and 47 and repealing sections 16 to 86, 151, 152, 175, 188 and forms 1 to 22, 43 and 44. In *Alberta*, Chapter 5, section 35 amends the Alberta Election Act, one important clause in the amendment authorizing the provincial government to hold a general plebiscite to ascertain opinion as to the desirability of amending or introducing any legislation. In *British Columbia*, Chapter 17, first session, amends the Provincial Elections Act, providing that ballot papers in the Victoria and Vancouver electoral districts shall state the party or interest which the nominated person represents, also with reference to list of candidates.

**Forestry.**—In *Nova Scotia*, by Chapter 2, a Commissioner of Forests and Game is appointed and regulations are made for protection against fires. In *New Brunswick*, Chapter 33 makes several amendments to the Forest Fires Act, one of these making any one wilfully responsible for a forest fire liable for the cost of extinguishing it. In *Manitoba*, Chapter 24 brings under the provision for wooded districts in the Fire Prevention Act all land within three miles of a forest reserve; it also makes all persons residing north of the 53rd parallel liable to render assistance in case of forest fires; greater powers are given the Fire Commissioner in dangerous fires and travellers are required to give information respecting their camps, etc. In *British Columbia*, Chapter 15, second session, provides for the appointment, and prescribes the duties, of a fire marshall and staff; Chapter 28,



first session, or the Forest Amendment Act, amends regulations in regard to pulp lands and licenses; also increases the assessment per acre for the Forest Protection Fund.

**Government and Constitution.**—In *Prince Edward Island*, Chapter 7 amends the Statute Law increasing the export tax and chancery court fees and amending the Veterinary Act and Debenture Act. In *Nova Scotia*, Chapter 12 provides for the consolidation and revision of the public statutes; Chapter 21 amends the Interpretation Act and Chapter 22 amends an Act entitled "Of the Executive Council" which is to be composed of such persons as the Lieut.-Governor from time to time thinks fit. In *Alberta*, section 7 of Chapter 12 confers certain of the powers of the Minister of Municipal Affairs upon the Deputy Minister, in reference to sale of lands; Chapter 5 amends the Motor Vehicles Act, The Unearned Increment Tax Act and certain other Acts and ordinances by an Act cited as The Statute Law Amendment Act. In *British Columbia*, Chapter 12, first session, amends the Constitution Act by raising the salaries of Cabinet Ministers holding portfolios to \$7,500, the premier's to \$9,000 without further salary as head of a department; the sessional indemnity of members is raised to \$2,000; the leader of the opposition receives \$2,000 in addition to his indemnity.

**Health, Medical Profession, etc.**—In *Nova Scotia*, Chapter 57 amends the Public Health Act, by providing for salary and expenses of public health nurse, administration of clinic, appointment of health officers, sanitary inspector, etc. In *New Brunswick*, Chapter 44 amends the Public Health Act of 1918 in reference to estimates of sub-district boards, assessment and borrowing powers to carry out provisions of Act. In *Ontario*, Chapter 74 amends the Public Health Act respecting payment of local boards in townships and agreement between urban and township municipalities in the matter of sewage disposal. In *Saskatchewan*, Chapter 65 amends the Venereal Diseases Act by forbidding those affected to follow certain occupations. In *Alberta*, Chapter 17 amends the Public Health Nurse Act respecting qualifications of such nurses; Chapter 18 amends the Registered Nurses Act, also with regard to qualifications; Chapter 20 amends the Venereal Diseases Act with reference to examination of persons in custody; Chapter 21 amends the Public Health Act especially in connection with constitution, etc., of health districts, vaccination, etc. In *British Columbia*, Chapter 17, second session, empowers medical practitioners under warrant of Health Officers to enter any building for purposes of making inquiry and examination with respect to health and may require any persons to be removed to nearest hospital; it also provides for isolation, etc., in case of infectious diseases.

**Highways.**—In *Nova Scotia*, Chapter 17 authorizes a provincial loan of \$350,000 for liabilities incurred on maintenance account of highways; Chapters 51, 52 and 53 amend the Public Highways Act, the first mentioned exempting certain properties from the Highways



tax, the second imposing a property tax and a poll tax on municipality or districts in the interest of highways. In *New Brunswick*, Chapter 27 amends "an Act to provide for the construction of and improvement of highways under Federal Aid" in respect to the amount authorized to be borrowed; Chapter 28 amends the Highway Act of 1918 by making provision for taking gravel from shore of stream or lake and in respect to regulations which the provincial government is authorized to make; Chapter 29 makes further provision for permanent bridges and work of a permanent character. In *Quebec*, Chapter 7 amends the Act providing for the abolition of toll bridges and turn-pike roads in the province; Chapter 11 amends the Act relating to the maintenance of provincial roads and of certain municipal roads, and the act relating to the maintenance of winter roads on certain provincial roads; Chapter 12 amends the law respecting the building and improvement of roads in the province. In *Ontario*, Chapter 27 amends the Provincial Highway Act with reference to right to open up and use original road allowance, contributions by municipalities other than county or by board or commission, deductions from other grants on default in municipal contributions, contributions by commission or other controlling body, provision for payment and continuing provincial highway through city, town or village; Chapter 25 amends the Highway Improvement Act by adding \$7,000,000 to highway improvement fund, by authorizing a by-law for levying of special rate on township property, etc. In *Saskatchewan*, Chapter 19 amends the Highways Act in respect to public reserves. In *British Columbia*, Chapter 18, second session, gives the Minister of Public Works authority to regulate, limit or prohibit traffic on any highway where damage is liable to be done through extraordinary traffic thereon.

**Housing.**—In *New Brunswick*, Chapter 13 authorizes Local Housing Board with consent of "Local Authority" to sell lands and houses, and provides means for levying and collecting losses caused by such a sale; it also defines "Local Authority" and "Local Housing Board". In *Manitoba*, Chapter 33 amends "An Act respecting Housing" by giving authority to municipalities to expend housing moneys to aid veteran mortgagors or to assist in redeeming property.

**Hydro-Electricity.**—In *New Brunswick*, Chapter 39 amends the Electric Power Act of 1921 by increasing the amount of loan. In *Ontario*, Chapter 20 amends the Power Commission Act by confirming certain by-laws; Chapter 21 purposes to make more equal provisions for the cost of hydro-electric power in Ontario, creating a fund account and paying grants not exceeding 50 p.c. of the capital cost where power is supplied to rural power districts; Chapters 22 and 24 are concerned with agreements between the Hydro-electric Power Commission of Ontario and the cities of Guelph and Toronto.

**Institutions, Custodial and Benevolent.**—In *Nova Scotia*, Chapter 7 provides for the establishment of hospitals and convalescent homes for insane persons, also for the appointment of a medical

superintendent for such; Chapter 8 provides for the establishment of an institution for the custody, treatment, cure and education of mentally defective persons, including morally defective persons, of a low grade; it also provides for a medical superintendent and staff for such; Chapter 166 changes the name of Halifax Infants' Home to The Infants' Home and Women's Hospital. In *New Brunswick*, Chapter 36 provides for charging for the maintenance of pauper lunatics confined in the Provincial hospitals; Chapters 71 and 79 affect the Victoria Public Hospital and the General Hospital at St. John. In *Quebec*, Chapter 86 authorizes institutions to entrust the custody of foundlings to persons, etc.; Chapter 152 provides for the incorporation of *L'Orphelinat Apostolique de la Malbaie* and Chapter 153 for that of the Educational and Charitable Institute; Chapters 154 to 156 provide for the incorporation of various other institutes. In *Manitoba*, Chapters 30 and 31 amend the Hospital Aid Act by a proviso for definition of "resident," by increasing provincial aid and the amount a hospital may charge against municipality for public patients. In *Saskatchewan*, Chapter 6 amends an Act respecting Sanatoria for the treatment of early cases, and hospitals for advanced cases of tuberculosis, by providing for a board of directors, etc.; Chapter 74 amends the Union Hospital Act by providing for the payment of board, etc. In *Alberta*, Chapter 16 amends the Hospitals Ordinance by providing for grants to hospitals, payments by local authorities and requiring vital statistics; Chapter 40 amends an Act respecting Gaols and Prisons by naming penalties for certain infringements of the rules by employees and by discharged prisoners; it also permits the warden, etc., to examine mail for prisoners.

**Labour.**—In *Nova Scotia*, Chapter 48 amends the Workmen's Compensation Act, especially section 5, chapter 61 of 1919. In *Quebec*, Chapter 46 is an Act respecting disputes between employers and employees of municipal public services and makes it illegal for an employer to cause a lockout and for employees to strike before submitting question to board of arbitration; it also provides for a board of arbitration fixing the remuneration of its members. The penalty provided for contravention of the Act by the employer is from \$100 to \$1,000 and for the employee between \$10 and \$50 for every day strike or lock-out lasts; the arbitrators are authorized to state which party is to bear the cost of arbitration. In *Ontario*, Chapter 77 amends the Trades and Labour Branch Act by authorizing the provincial government to make regulations affecting employment service councils. In *Manitoba*, Chapter 83 amends the Workmen's Compensation Act by striking out certain limits; by providing that compromises must be approved by the board; that the board may file claim for injured men; that principal is liable for sub-contractor and that an employer may be admitted to compensations. In *Saskatchewan*, Chapter 73 amends the Workmen's Compensation Act with reference to definition of "workman" and by raising the limit of compensation. In *Alberta*, Chapter 30

amends the Workmen's Compensation Act of 1918 in respect of appointment of the commissioners; of bringing an industry within the scope of the Act; and of the amount of compensation.

**Mining.**—In *Nova Scotia*, Chapter 20 amends and consolidates the Mines Act. In *Ontario*, Chapter 11 amends the Mining Tax Act in respect of limitations upon deductions for municipal income tax, of relief in case of forfeiture for non-payment and of forfeited lands sold for non-payment of school taxes; Chapter 16 amends the Mining Act of Ontario by defining the noun "Mine" and by amending or repealing several clauses and sections; Chapter 17, respecting Natural Gas, has particular reference to powers of Minister and referee.

**Municipal Affairs.**—In *Nova Scotia*, Chapter 27 amends the Municipal Act with reference to sheep protection; Chapter 34 amends the Municipal Courts Act; Chapter 44 amends the Municipal Debentures Act in respect of manner in which money is raised and of the form of debenture. In *New Brunswick*, Chapter 43 amends the Municipalities Act, especially in respect of provisions for licensing and regulating ferries and fixing rate of fares. In *Quebec*, Chapter 48 amends the Quebec Municipal Code; Chapter 81 authorizes municipalities, in certain cases, to provide sinking funds; Chapters 105 to 109 amend certain articles of the Quebec Municipal Code. In *Ontario*, Chapter 63 amends the Municipal Act in respect of authority of municipal board to separate farm lands from towns and villages; of adjustments of assets and liabilities to be determined by board; of disqualification of certain persons as members of council; of power to use excess land by way of compensation to owners; of establishing restricted districts or zones; of buildings, etc.; Chapter 64 amends the Local Improvement Act; Chapter 65, the Planning and Development Act; Chapter 66 makes regulations respecting public improvements and services in certain suburban areas; Chapter 68 amends the Municipal Tax Exemption Act; Chapter 69 the Statute Labour Act. In *Saskatchewan*, Chapter 11 amends the Municipalities Relief Act by authorizing municipalities to borrow from banks for advances to farmers suffering from crop failure; Chapter 39 amends the Municipal Hail Insurance Act, particularly by imposing a penalty in cases of failure to make reports. In *Alberta*, Chapter 15 amends the Municipal Hospitals Act; Chapter 26 amends the Municipality Finance Commission Act, dealing especially with arrears in taxes and school taxes; Chapter 27 amends the Hail Insurance Act; Chapter 30 amends the Town Act; Chapter 31 the Village Act; Chapter 32 the Municipal District Act. In *British Columbia*, Chapter 9, first session, gives the councils of municipalities power to establish their own cemeteries, etc.; Chapter 44, first session, gives municipal councils power by a three-fifths vote to pay out of general revenue the costs of any special survey under the Special Surveys Act; municipal corporations are exempted from payment of registration fees under the Motor Vehicle Act in respect of vehicles used in the police and fire departments; Chapter 37, second session, enables municipalities to borrow money



by by-law to redeem obligations which are secured by hypothecation of arrears of taxes; Chapter 38, second session, provides financial aid for municipalities on the basis of population.

**Partnerships.**—In *Nova Scotia*, Chapter 4 or “The Registration of Partnerships Act” defines “partnership”, requires certification of registration, etc. In *New Brunswick*, Chapter 19, respecting partnership, defines partnership, prescribes rules for determining whether or not a partnership exists, defines liabilities of partnership, mutual rights and duties, etc.

**Soldiers.**—In *New Brunswick*, Chapter 25 authorizes the Mayor of St. John to take over the assets of the Soldiers’ Compensation Association. In *Quebec*, Chapter 78 authorizes an agreement between Provincial and Dominion Governments whereby the latter may establish its hospitals in province for insane soldiers, and whereby certain powers are vested in officers of Dominion Government. In *Ontario*, Chapter 40 defines what is deemed sufficient proof of death of soldiers and sailors while on active service. In *Manitoba*, Chapter 68 amends the Soldiers’ Taxation Relief Act.

**Temperance.**—In *Nova Scotia*, Chapter 58 amends the Temperance Act with reference to vendors, penalties, etc. In *Quebec*, Chapter 24 is an Act of 145 sections respecting alcoholic liquors and Chapter 25 respecting the possession and transportation of alcoholic liquor. In *Ontario*, Chapter 73 amends the Ontario Temperance Act by defining “bonded liquor warehouses,” permitting appeals from convictions to judge of county or district court, also appeals from order of dismissal; also amends section 139 in conformity with prohibition of importation. In *Saskatchewan*, Chapter 70 amends several sections of the Saskatchewan Temperance Act; among these are amendments in reference to inspectors and enforcement officers, inventories by holders of permits, restriction on sale by druggists, keeping liquor on premises where soft drinks are sold. In *British Columbia*, Chapter 30, first session, provides for Government control and sale of alcoholic liquors under a board of three persons appointed by the government; these liquor stores are to be opened at various centres; vendors in charge have power to issue permits for the purchase of liquor and sell liquor upon physicians’ prescription; the net profits are to be divided equally between the public service of the province and the municipalities for hospitals, etc.

**Transportation.**—In *Nova Scotia*, Chapter 63 amends the Motor Vehicle Act. In *Quebec*, Chapter 2 refers to the contract between the Government and the Interprovincial and James Bay Railway Company respecting the construction of a line of railway from Kipawa to the Rivière des Quinze; Chapter 31 amends the Revised Statutes of 1909 respecting the annual returns to be made by railway companies; Chapter 84 is in reference to the exercise of certain powers by railway companies. In *Ontario*, Chapter 12 amends the Corporation Tax Act by imposing an additional tax on railways. In *Manitoba*, Chapter 52 amends the Manitoba Railway Act by



extending the period of limitation in section 116 of Chapter 168, R.S. of Manitoba, 1913, to two years. In *Saskatchewan*, Chapter 68 amends the Vehicles Act particularly in reference to information given *re* vehicles and to prohibition of driving and impounding of vehicle. In *British Columbia*, Chapter 36, second session, amends the Motor Vehicles Act by requiring that all drivers of motor vehicles shall slow up to ten miles an hour when approaching a curve, etc.; municipally owned vehicles and trailers are declared exempt from registration and license fees, as are vehicles and trailers owned and used by persons who lost a limb in the war; Chapter 41, second session, requires that no electric street railway or tramway company shall operate any "one-man car" without consent of the Minister of Railways.

**Vital Statistics.**—In *Alberta*, section 7 of Chapter 16 adds a section to the Hospital Ordinance, requiring the vital statistics form to be filled up and signed by the mother before she leaves hospital; Chapter 19 amends the Vital Statistics Act by naming the Deputy Minister of Health as Registrar General, providing for the appointment of a Deputy Registrar General, requiring registration of both birth and death in case of still-born children, raising the fee for registry search, etc.

#### PRINCIPAL EVENTS OF THE YEAR 1921.

**The Imperial Conference.**—The Imperial Conference of the Prime Ministers of the countries included in the British Commonwealth of Nations, was held in London from June 20 to August 5, 1921, with the Prime Minister of the United Kingdom, Rt. Hon. D. Lloyd George, as *ex officio* Chairman. Canada was represented by Rt. Hon. Arthur Meighen.

In his opening address of welcome the Prime Minister of the United Kingdom made the following statement: "The British Empire is progressing very satisfactorily from a constitutional standpoint. The direct communication between Prime Ministers, as established during the war, has, I think, worked very well, and we have endeavoured to keep you thoroughly abreast with all important developments in foreign affairs . . . . The British Dominions have achieved full nationhood and now stand beside the United Kingdom as equal partners in the dignities and responsibilities of the British Commonwealth."

Among the important subjects to be considered was the renewal of the Anglo-Japanese treaty, Mr. Meighen taking the ground that it should not be renewed and impressing upon the Conference the desirability of close friendship with the United States. This question was finally settled at the Washington Conference (*q.v.*) by the widening of the Anglo-Japanese Alliance into a four power pact, to which both Japan and the United States are parties.

With regard to the projected Constitutional Conference, the following resolution was adopted:—

(a) Continuous consultation, to which the Prime Ministers attach no less importance than the Imperial War Conference of 1917, can only be secured by a substantial improvement in the communication between the component parts of the Empire. Having regard to the Constitutional developments since 1917, no advantage is to be gained by holding a Constitutional Conference.

(b) The Prime Ministers of the United Kingdom and the Dominions and the Representatives of India should aim at meeting annually or at such longer intervals as may prove feasible.

(c) The existing practice of direct communication between the Prime Ministers of the United Kingdom and the Dominions, as well as the right of the latter to nominate Cabinet Ministers to represent them in consultation with the Prime Minister of the United Kingdom, are maintained.

Other resolutions were passed regarding co-operation in the Imperial wireless scheme, approving of uniform legislation on the limitation of shipowners' liability by clauses in bills of lading, asking the radio research board to investigate and report on wireless telephony, stating that "in the interests of the solidarity of the British Empire, it is desirable that the rights of Indians to citizenship should be recognized," and urging that a conference of representatives of the Patent Offices of the Dominions should be held in London to consider a system of granting patents which should be valid throughout the Empire.

At the close of the Conference an address to the King was passed, declaring that "we have been conscious throughout our deliberations of a unanimous conviction that the most essential of the links that bind our widely spread peoples is the Crown, and it is our determination that no changes in our status, as peoples or as Governments, shall weaken our common allegiance to the Empire and its Sovereign."

**The Washington Conference.**—A Conference on the Limitation of Armaments was held from November 12, 1921, to February 6, 1922, at Washington, D.C., on the invitation of the United States Government, addressed on August 11, 1921, to the Governments of Great Britain, France, Italy and Japan. Invitations were also extended to China, Belgium, the Netherlands and Portugal, asking them to participate in the discussions on Pacific and Far Eastern questions to be held in connection with the Conference. The Dominion of Canada was represented by Right Hon. Sir Robert L. Borden.

On the opening of the Conference, the Hon. C. E. Hughes, Secretary of State of the United States, was elected as Chairman. Two committees on programme and procedure were appointed to suggest methods of organization and procedure. As a result of their deliberations it was decided to appoint two main committees: (1) The Committee on Limitation of Armaments, consisting of all the Plenipotentiary Delegates of the five powers—the United States, the British Empire, France, Italy and Japan; (2) the Committee on

Pacific and Far Eastern Questions, consisting of all the Plenipotentiary Delegates of the nine powers—the five already mentioned, together with Belgium, China, the Netherlands and Portugal. These Committees appointed sub-committees to examine and report upon particular questions when this was considered desirable.

Before the Conference met the United States Government had prepared and submitted to the other Powers a list of headings intended to serve as tentative suggestions as to agenda. Practically this came to be regarded as the informal agenda. It was as follows: *Limitation of Armament*: (1) Limitation of Naval Armament, (a) basis of limitation; (b) extent; (c) fulfilment: (2) Rules for control of new agencies of warfare: (3) Limitation of Land Armament. *Pacific and Far Eastern Questions*: (1) Questions relating to China, (a) Principles to be applied; (b) applications with regard to territorial integrity; administrative integrity; open-door equality of commercial and industrial opportunity; concessions, monopolies or preferential economic privileges; development of railways; preferential railroad rates; status of existing commitments: (2) Siberia, under headings similar to the preceding: (3) Mandated islands and electrical communications in the Pacific.

In the opening session on November 12, 1921, the Hon. C. E. Hughes, Chairman of the Conference, laid down definite proposals that the great powers should abandon their programmes for the building of battle ships and battle cruisers; that certain new capital ships and certain older vessels should be scrapped; that no new replacement tonnage should be laid down for 10 years and that when constructed the maximum tonnage should be limited to 500,000 for the United States, 500,000 for Great Britain and 300,000 for Japan. This proposal was accepted "in principle" by the delegates, but it took several weeks of discussion before the details were arranged.

These provide for a discontinuance of all building of capital ships during 10 years, France and Italy being allowed certain replacements after 1927. Capital ships include "every vessel of war, not an aircraft carrier, whose displacement exceeds 10,000 tons standard displacement, or which carries a gun with a calibre exceeding 8 inches." Existing capital ships are to be scrapped so as to leave the United States 18 (525,850 tons), the British Empire 20 (558,980 tons), Japan 10 (301,320 tons), France 10 (221,170 tons), Italy 10 (182,800 tons). After 1931 ships over 20 years old may be replaced so as to maintain ratios of 525, 525, 315, 175, 175 among the five powers, no vessel being over 35,000 tons. The treaty is to be effective for 15 years and to continue after that unless denounced with 2 years' notice. It may be suspended in time of war, with the exception of the articles relating to scrapped vessels.

Aircraft carriers are limited with respect to total and individual tonnage, but aircraft themselves are not limited; submarines and fighting surface auxiliaries may not exceed 10,000 tons displacement or carry guns over 8 inches, but there is no limitation in their total tonnage. Merchant vessels may not be prepared for military use in time of peace except to stiffen decks for guns of not over 6 inches.



No limitation is placed on land forces or armaments. The *status quo* "with regard to fortifications and naval bases" is to be maintained in the American, British and Japanese insular possessions in the Pacific, except Hawaii, Australia, New Zealand and the Japanese home islands and the islands nearest the American continent except the Aleutians.

Rules were adopted declaring the use of submarines against merchant vessels to be piracy and prohibiting the use of noxious and poisonous gases, as well as a resolution urging the calling of a conference to consider the laws of war.

The Committee on Far East and Pacific Questions was concerned primarily with China, though Siberia and Pacific island questions were also considered. Under the main Chinese treaty signed February 6, 1922, the powers other than China agreed to respect the sovereignty, the independence and the territorial and administrative integrity of China; to provide the fullest opportunity to China to develop and maintain an effective and stable government; to use their influence for establishing and maintaining the principle of equal opportunity for the commerce and industry of all nations throughout China and to refrain from seeking special rights or privileges in China. The Contracting Powers also agreed not to support any agreements by their respective nationals designed to create spheres of influence, while China agreed not to exercise or permit unfair discrimination of any kind throughout the railways of China.

The Quadruple Pacific Treaty was signed between the United States, the British Empire, France and Japan on December 13, 1921. While it was no essential part of the proceedings of the Conference, it naturally arose out of the deliberations which took place. In it the four parties agreed as between themselves to respect their rights in relation to their insular possessions and insular dominions in the region of the Pacific Ocean, to summon a conference of the parties for adjustment and arbitration of any controversies arising between any of them, and to consult as to the measures necessary to be taken if their rights were threatened by the aggressive action of any other power. This Treaty, which also applies to the mandated islands, and to the insular possessions of Japan, is to continue for 10 years, and to be terminable thereafter on 12 months' notice.

**Second Assembly of the League of Nations.**—The Second Assembly of the League of Nations met at Geneva, Switzerland, from September 5 to October 5, 1921, with Dr. van Karnebeek (Holland) as president. Forty-eight states were represented, among them Canada by Right Hon. C. J. Doherty and Sir George H. Perley. The first constructive Act was to complete the constitution of the International Court of Justice. This consists of the following judges elected for a period of nine years: Prof. Altamira (Spain), Prof. Anzilotti (Italy), Senor Barboza (Brazil), Dr. de Bustamente (Cuba), Lord Finlay (Great Britain), Judge Loder (Holland), Prof. Bassett Moore (United States), Prof. Oda (Japan), Prof. Weiss (France), Prof. Max Huber (Switzerland) and Judge Nyholm (Denmark).



The republics of Esthonia, Latvia and Lithuania were admitted to the League, bringing the membership of the League to 51 States. The states still outside of the League are as follows: United States, Germany, Russia, Turkey, Egypt, Hungary, Ecuador, Mexico.

Among the matters which were considered at the second meeting of the Assembly were the troubles of Poland and Lithuania, the controversy between Bolivia and Chile, the proposals for the relief of the starving population of Soviet Russia, the international traffic in women and children and the matter of expenses. As regards the latter it was decided that, subject to ratification by the Governments, Great Britain and France should each pay 90 units towards the expenses of the League, China, India, Italy and Japan 65 units each, Canada and various other countries 35 units each, other smaller states paying less, until the minimum is reached with Albania, Costa Rica, Guatemala, Honduras, Siberia, Luxemburg, Nicaragua, Panama, Paraguay and Salvador, paying 2 units each. Under this revision of the apportionment of expenses Canada's contribution is substantially reduced.

**The League of Nations Society of Canada.**—At a meeting held in Ottawa on May 31, 1921, the League of Nations Society of Canada was formed. The Governor-General of Canada presided, and such prominent leaders in Canadian public life as Sir Robert Borden, Sir George Foster, Hon. Dr. Béland and others were present.

The following resolution was carried unanimously: "that the meeting proceed to the organization of the League of Nations Society of Canada with the following objects: (1) to promote international peace; (2) to furnish information about the League of Nations, its principles, its organization and its work; (3) to study international problems and Canada's relations thereto as a member of the British Commonwealth and the League of Nations; (4) to foster mutual understanding, goodwill, and habits of co-operation between the people of Canada and other countries, in accordance with the spirit of the League of Nations; (5) to promote the establishment of provincial or local associations, clubs, or other bodies having like objects, and to co-operate with any existing organization for such purposes."

The following officers were elected: honorary presidents: Rt. Hon. Arthur Meighen, Hon. (now Rt. Hon.) W. L. Mackenzie King, and Hon. T. A. Crerar; president, Rt. Hon. Sir Robert Borden; vice-presidents, the Lieutenant-governors of Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia, Prince Edward Island, Saskatchewan, Alberta, Rt. Hon. Sir George Foster, Rt. Hon. C. J. Doherty, Hon. N. W. Rowell, Hon. Dr. Béland; honorary secretary, Vincent C. Massey; honorary treasurer, A. J. Brown.

**Dominion General Election.**—On September 21, 1921, the Right Hon. Arthur Meighen announced the reconstruction of his Cabinet, and shortly afterwards the dissolution of the Thirteenth Parliament took place. At the general election of December 6, 1921, the Government was defeated, retaining only 50 seats. The Liberals,

having carried 118 constituencies, took office on the resignation of Mr. Meighen, with Hon. (now Rt. Hon.) W. L. Mackenzie King as Prime Minister. One of the outstanding features of the election was the rise of a third party, the Progressives, which, under the leadership of Hon. T. A. Crerar, carried 65 seats in Ontario and the West. Besides these the Labour party elected two members, one in Winnipeg and one in Calgary. On the meeting of Parliament the Progressives renounced the position of official Opposition, to which their numbers gave them a claim; the Conservatives, therefore, under the leadership of Mr. Meighen, constitute the official Opposition in the Fourteenth Parliament.

**Provincial General Elections.**—In Saskatchewan at a general election on June 9, 1921, the Liberal Government of Premier Martin was returned to power with a slightly diminished majority, carrying 45 out of 63 seats.

In Alberta, at a general election on July 18, 1921, the Liberal Government of Hon. Chas. Stewart was defeated by the Farmers' organization, which secured 38 out of the 61 seats in the Legislature. On August 13, their leader, Hon. Herbert Greenfield, took office as Premier.

In Manitoba, at a general election which took place on July 18, 1922, the Norris Government was defeated, the United Farmers securing a working majority and organizing a government headed by the Hon. John Bracken, formerly principal of the Manitoba Agricultural College.

**Acquisition of the Grand Trunk by the Government.**—This subject is dealt with in the sub-section on steam railways, pages 527-528.

**The Economic and Financial Year.**—Throughout the year 1921 the general deflation of prices which had been so much in evidence in the latter part of 1920, continued, though at a slackening rate; indeed, at the end of the year there was a slight upward movement. The Department of Labour's index number of wholesale prices (average prices for 1890-1899=100) fell from 281.3 in January to 230.7 in December (see p. 644), a decline of approximately 18 per cent during the year. The Department of Labour's record of changes in the cost of living in Canada, based upon weighted retail prices (see p. 647) shows a decline from 192 to 156, or 18.75 per cent, between December, 1920, and December, 1921, 1913 prices being considered as 100. These declines were naturally most welcome to urban consumers, who had been very hard hit by the prolonged and rapid increase in the cost of living during the war.

Declining prices were naturally less acceptable to the producers, more especially to those classes of producers who, like the farmers, were most affected thereby. The prices of the commodities which the farmers had to sell declined far more rapidly than the prices of the commodities which they had to buy, this decline being graphically shown on page 273. According to this chart and its accompanying

table, the average prices which the farmer received in 1921 were 147.5 as compared with 204.9 in 1920 and 252.7 in 1919, average prices for the quinquennium 1909-1913 being considered as 100. To put it in another way, the farmers' selling prices for 1921 were 28 per cent below those of 1920. The farmer, indeed, was not alone in his troubles. Producers of many other primary commodities, among them producers of metallic minerals, such as nickel, copper, etc., suffered in a similar way and for similar reasons, as may be deduced from the statistics of the quantity and value of mineral production, published on page 337.

Prices of manufactured commodities in almost all cases came down less rapidly than those of the raw materials of which they were composed. Thus, in the metals and implements class, the average price of metals fell from 206.8 in January to 168.5 in December, while implements fell only from 271.7 to 245. The disparity was to some extent inevitable, partly because of the lapse of time involved in converting the primary commodity into a finished manufactured article and partly because of the fact that the weekly wage rates of the employees in manufacturing establishments, once fixed, could not readily be altered. (Their average annual receipts, might, of course, be reduced through the unemployment consequent upon a reduced demand for the commodities which they produced). A similar state of affairs obtained throughout the great transportation industry and in coal mining. Even at the time of writing, this disproportion in the deflation in different industries has not been completely corrected.

For the above reasons unsettled and depressed conditions prevailed throughout the business world in 1921. Employment in the manufacturing industries was at a low ebb throughout the year, touching its lowest point (68.7 per cent of the number employed in the same factories on January 17, 1920), at the end of the year. For all industries the index number of employment declined from 90.4 in January to 77.9 in December. Fortunately, during 1922 to date employment has fairly rapidly increased, the index of employment as reported by employers being on September 30, 94.6 (see diagram on page 631).

The depression was also reflected in the volume of financial transactions. The amount of exchanges of the clearing houses of chartered banks in 16 leading cities for the calendar year 1921 was only \$16,811,287,086 as against \$19,588,337,285 in 1920. The deposits of the public in Canada, which had been \$1,950,504,230 on December 31, 1920, were a year later only \$1,781,749,790. Similarly, the bank notes in circulation declined from \$228,758,587 at the former date to \$184,602,546 at the latter. The annual values of building permits issued by 35 cities declined from \$100,679,839 in 1920 to \$94,508,164 in 1921. These declining money values, did not, of course, always represent declining physical quantities. The great decline in the price of commodities was largely, if not mainly, responsible therefor.

The decline in prices was also largely responsible for the lowered values of foreign trade. In the calendar year 1921 the total imports for consumption were valued at \$799,394,598 as against \$1,336,921,021



in 1920, and the total exports at \$816,694,281 as against \$1,302,805,114. Here again the monthly statistics of 1922 show a stabilization and even an increase of trade.

On the whole, it would appear that the worst of the depression is over, and that the considerable amount of readjustment which is still to be made before "normalcy" is attained may be completed without any severe shocks to industry. This prediction is, however, dependent upon the continuance of peace and general reconstruction throughout the civilized world. It must not be forgotten that the continent of Europe, formerly the great consumer of the products and raw materials of the newer countries of the world, is still in a very unsettled condition, its purchasing power enormously reduced through the instability of its currencies, through the withdrawal for military purposes of a large portion of its labour force, already depleted by the war, from productive industry, and through its 26 protective tariffs, many of them established for political rather than economic purposes in what were formerly free trade areas, e.g., the old Austria-Hungary. Economic paralysis throughout the European continent must seriously affect the prosperity of Canada, though her foreign trade, as has been pointed out elsewhere in this book, is mainly with the United Kingdom and the United States. These countries, however, especially the latter, are in normal times largely dependent upon the European continent for their markets, and their power to purchase our products is affected by the decline in Europe's purchases of their commodities.

**Obituary.—1921:** Jan. 2. Sir Frank Baillie, K.B.E., formerly Director of the National Aeroplane Factory, Toronto. William Fitzgerald, Assistant Deputy Minister of Finance and Superintendent of Insurance, 1885-1914. Sir William Peterson, former Principal, McGill University. Jan. 7. Col. H. F. McLeod, M.P. for York-Sunbury. Oscar Gladu, M.P. for Yamaska. Jan. 8. Dr. J. B. Crozier, philosopher and economist. Jan. 10. James Clancy, ex-M.P., Provincial Auditor for Ontario. Jan. 14. Sir William J. Gage, publisher and philanthropist, Toronto. Jan. 15. W. G. Parmelee, Deputy Minister of Trade and Commerce, 1893-1908, Jan. 25. The Right Hon. A. L. Sifton, Secretary of State. Jan. 30. Hon. L. J. Cannon, Judge of the Superior Court, Quebec. Feb. 2. The Hon. Peter McSweeney, Northumberland, N.B., Senator. Feb. 6. Lt.-Col. F. W. Hibbard, Chairman of Public Service Commission, Montreal. Feb. 8. The Hon. L. P. Pelletier, Postmaster General, 1911-1914. Feb. 20. Thos. G. Wallace, M.P. for West York since 1908. Feb. 24. Thomas P. Owens, Ottawa, Editor of *Hansard*. Mar. 10. The Hon. Adam B. Crosby, Halifax, Senator. Mar. 18. G. E. Craney, ex-M.P., Saskatoon. Mar. 19. Dr. Martin J. Griffin, former Parliamentary Librarian. April 6. Hon. J. E. Englehart, former Chairman of the Timiskaming and Northern Ontario Railway Commission. April 9. The Hon. Sydney A. Fisher, Minister of Agriculture, 1896-1911. April 18. Hon. Wm. Hespeler, Speaker of Manitoba Legislature. June 6. David Ewart, I.S.O.,



Dominion Consulting Architect. July 24. J. A. Calder, M.L.A., member of Ontario Legislature. July 28. Sir S. A. French, First Commissioner Canadian N. W. M. Police. July 29. Hon. Michael E. Bernier, Minister of Inland Revenue, 1900-1904. July 30. The Hon. Lieut.-Col. James Domville, of Rothesay, N.B., Senator. Aug. 24. Lieut.-Gen. Sir Sam Hughes, K.C.B., Minister of Militia, 1911-1916. Aug. 28. The Hon. T. W. Patterson, Lieutenant-Governor of British Columbia, 1909-1914. Aug. 29. The Hon. Lionel H. Clarke, Lieutenant-Governor of Ontario, from Nov., 1919. Aug. 30. Emmanuel B. Devlin, M.P. for Wright County, Quebec. Sept. 1. Hon. Roger C. Clute, Puisne Judge, High Court Division, Toronto, Ont. Sept. 12. The Hon. Laurence G. Power, of Halifax, N.S., Senator. Sept. 17. The Hon. William C. Edwards, of Ottawa, Ont., Senator. Oct. 2. Valentine Stock, former member of Ontario Legislature. Oct. 25. Sir John Kennedy, former chief engineer, Montreal Harbour Commission. The Hon. Frederic Nicholls, of Toronto, Ont., Senator. Oct. 26. Hon. Benjamin Gallant, Minister without Portfolio, P.E.I. Nov. 1. Lady Laurier. Nov. 6. R. B. Richardson, M.P., Journalist. Nov. 18. Sir Frederick Orr-Lewis, President of Canadian Vickers, Ltd. Nov. 21. Edmund Meredith, K.C., London Ont. Nov. 27. Sir Douglas C. Cameron, K.C.M.G., former Lieutenant-Governor of Manitoba. Nov. 30. Lord Mount-Stephen, First President of the Canadian Pacific Railway, Montreal. Dec. 2. Damase Racine, M.L.A., Casselman, Russell County, Ont. Dec. 10. The Hon. Thomas W. Crothers, Ottawa, Ont., Senator. James E. Rourke, Ottawa, Ont., Comptroller of Currency. Dec. 18. P. R. McGibbon, M.P., Argenteuil, Que. **1922:** Jan. 10. Judge R. D. Gunn, Senior Judge of Carleton County, Ont. Robert A. Pringle, K.C., Ottawa, Ont., formerly M.P. for Stormont County. Jan. 17. William P. Archibald, Dominion Parole Officer, Ottawa, Ont. Jan. 25. The Hon. Arthur Boyer, Montreal, Que., Senator. Jan. 26. The Hon. Robt. Beith, Bowmanville, Ont., Senator. Feb. 18. Major-General J. Lyons Biggar, C.V.O., C.M.G., formerly Quartermaster-General of Canadian Military Forces. Major-General Sir David Watson, Quebec, Que. Mar. 16. Hon. J. W. Longley, Puisne Judge of the Supreme Court of Nova Scotia. Mar. 30. Sir John Craig Eaton, Kt. April 27. The Hon. F. P. Thompson, Fredericton, N.B., Senator. May 3. Hon. W. H. P. Clement, Vancouver, B.C., Puisne Judge of the Supreme Court of British Columbia. May 22. Ernest F. Jarvis, I.S.O., Assistant Deputy Minister of Militia and Defence. May 23. Hon. Robert F. Sutherland, Puisne Judge, High Court Division, Ontario. June 17. Hon. I. H. Chauvin, Judge of Superior Court, District of Montcalm, Que. Aug. 2. Dr. Alexander Graham Bell, Sydney, N. S., inventor. Aug. 24. His Honour Judge Hugh McMillan, Lindsay, Ont., Junior Judge in the Counties of Victoria and Haliburton. Sept. 17. R. B. Angus, Montreal, pioneer industrial leader. Oct. 7. Hon. John A. Stewart, K.C., Perth, Ont., Minister of Railways and Canals in the reconstructed Meighen Administration. Oct. 19. D. A. Lafortune, M.P., Jacques Cartier Division, Montreal, Que. Oct. 22. Edward Blackadder, M.P., Halifax, N.S. Nov. 6. Juchereau de St. Denis Le Moine, I.S.O.

## XV. EXTRACTS FROM THE CANADA GAZETTE.

(Most of the official appointments made during 1921 will be found on pages 748-753 of the 1920 Year Book.)

**Privy Councillors.—1922:** March 1. Peter Charles Larkin, High Commissioner for Canada in the United Kingdom.

**Lieutenant-Governors.—1921:** Oct. 17. His Honour Sir James Albert Manning Aikins, Winnipeg, Manitoba, Knight Bachelor, to be Lieutenant-Governor of the said Province of Manitoba, from the 7th August, 1921 (second term). **1922:** March 21. Hon. McCallum Grant, Halifax, N.S., to be Lieutenant-Governor of the said Province of Nova Scotia (second term).

**Senators.—1921:** Oct. 17. Archibald Beaton Gillis, White-wood, Sask. Nov. 4. The Hon. Sir Albert Edward Kemp, K.C.M.G., Toronto, Ont., a member of the King's Privy Council for Canada. Nov. 7. Brigadier-General Archibald Hayes Macdonell, C.M.G., D.S.O., Toronto, Ont. Nov. 25. Frank Bunting Black, Sackville, N.B. Dec. 1. Sanford Johnson Crowe, City of Vancouver, B.C. Dec. 5. Peter Francis Martin, Halifax, N.S. **1922:** Jan. 4. Archibald Blake McCoig, Chatham, Ont. Feb. 10. Arthur Charles Hardy, Brockville, Ont. March 11. Gustave Boyer, Rigaud, Que. and Frederick Forsyth Pardee, Sarnia, Ont. Oct. 27. Onésiphore Turgeon, Bathurst, N.B.

**New Members of the House of Commons.**—The following new members of the House of Commons were returned at by-elections during 1922 up to Nov. 20:—Feb. 11. Rt. Hon. Arthur Meighen, for Grenville, Ont. Mar. 4. Hon. Charles Stewart, for Argenteuil, Que. Mar. 23. Joseph Rodolphe Ouimet, for Vaudreuil-Soulanges, Que. Mar. 30. James Horace King, for Kootenay (East), B.C. May 17. George Joseph Bouchard, for Kamouraska, Que. Sept. 13. Aldéric J. Benoit, for St. Johns-Iberville, Que. Nov. 20. Théodule Rhéaume, for Jacques Cartier, Que. Eusèbe Roberge, for Mégantic, Que. John G. Robichaud, for Gloucester, N.B.

**Dominion Ministers.** The Twelfth Ministry with the Right Hon. William Lyon Mackenzie King as Premier, took office on Dec. 29, 1921. For complete list of Cabinet Ministers see page 770.

**Judicial Appointments. 1921:** Oct. 3. Herbert MacDonald Mowat, Toronto, Ont., to be a Judge of the Supreme Court of Ontario and a member of the High Court Division of the said Court and to be *ex officio* a member of the Appellate Division of the said Court. His Honour John Tyler, a Junior Judge of the County Court of the County of York, Ont., to be a Local Judge of the High Court Division of the Supreme Court of Ontario. Oct. 3. Andrew Knox Dysart, Winnipeg, Manitoba, to be a Judge of His Majesty's Court of King's Bench for Manitoba. The Hon. Thomas Dlewellyn Metcalfe, a Judge of His Majesty's Court of King's Bench for Manitoba, to be a Judge of Appeal of the Court of Appeal for Manitoba. Oct. 12. The Hon.

James McKay, a Judge of the Court of King's Bench for Saskatchewan, to be a Judge of Appeal of the Court of Appeal for Saskatchewan and to be *ex officio* a Judge of the Court of King's Bench for Saskatchewan. Philip Edward MacKenzie, Saskatoon, Saskatchewan, one of His Majesty's Counsel learned in the law for said province, to be a Judge of the Court of King's Bench for Saskatchewan. Oct. 17. His Honour John Charles McIntosh, Junior Judge of the County Court of Nanaimo, to be a Local Judge of the Supreme Court of British Columbia. Oct. 31. Henry Colin Pope, Moose Jaw, Sask., barrister-at-law, to be the Judge of the District Court of the Judicial District of Melfort, Sask. Nov. 12. His Honour Angus M. Macdonald, Judge of the District Court of the District of McLeod, Alberta, to be a Local Judge of the Supreme Court of Alberta. Nov. 25. The Hon. Humphrey Mellish, a Judge of the Supreme Court of Nova Scotia, to be a Local Judge in Admiralty of the Exchequer Court in and for the Admiralty District of Nova Scotia. Tecumseh Sherman Rogers, Halifax, N.S., one of His Majesty's Counsel learned in the law for the said province, to be a Puisne Judge of the Supreme Court of Nova Scotia. Dec. 21. The Hon. Farquhar Stuart MacLennan, one of the Justices of the Superior Court for the Province of Quebec, to be the Local Judge in Admiralty of the Exchequer Court of Canada for the District of Quebec in the said province. **1922:** Jan. 25. Sévérin Letourneau, Montreal, Que., one of His Majesty's Counsel learned in the law for the said province, to be a Puisne Judge of the Court of King's Bench in and for the said Province of Quebec. His Honour Duncan Campbell Ross, Judge of the County Court, County of Elgin, Ont., to be a Local Judge of the High Court Division of the Supreme Court of Ontario. Jan. 25. His Honour Lucien Dubuc, Judge of the District Court of the District of Peace River, Alberta, to be Junior Judge of the District Court of the District of Edmonton, Alberta. Feb. 15. Robert Grant Fisher, London, Ont., one of His Majesty's Counsel learned in the law for the said province, to be a Judge of the Supreme Court of Ontario and a member of the High Court Division of the said Court and *ex officio* a member of the Appellate Division of said Court. His Honour James Arthur Mulligan, Judge of the County Court of the County of Carleton, in the Province of Ontario, to be a Local Judge of the High Court Division of the Supreme Court of Ontario. His Honour Daniel O'Connell, a Junior Judge of the County Court of the County of York, Ont., to be a local Judge of the High Court Division of the Supreme Court of Ontario. May 1. The Hon. James Emile P. Prendergast, a Judge of the Court of King's Bench for Manitoba, to be a Judge of the Court of Appeal for Manitoba and to be *ex officio* a Judge of the Court of King's Bench for Manitoba. John Evans Adamson, Winnipeg, Man., barrister-at-law, to be a Judge of the Court of King's Bench for Manitoba. May 5. Charles A. Stein, Rivière du Loup, Que., one of His Majesty's Counsel learned in the law for the said province, to be a Puisne Judge of the Superior Court in and for the Province of Quebec. May 8. David A. Macdonald, Vancouver, B.C., one of His Majesty's Counsel learned in the law for the said province, to be



a Judge of the Supreme Court of British Columbia. June 28. Lucien Dubuc, Judge of the District Courts of the Districts of Peace River and Edmonton, to be Stipendiary Magistrate for the North West Territories. July 22. Thibaudeau Rinfret, Montreal, Que., and Joseph Demers, St. Johns, Que., to be Puisne Judges of the Superior Court in and for the said Province of Quebec. William Melville Martin, Regina, Sask., to be a Judge of the Appeal Court for Saskatchewan and to be *ex officio* a Judge of the Court of King's Bench for Saskatchewan. Oct. 7. Robert Smith, Cornwall, Ont., one of His Majesty's Counsel learned in the law for the said province, to be a Judge of the Supreme Court of Ontario and a member of the High Court Division of the said Court and *ex officio* a member of the Appellate Division of the said Court. Oct. 14. Auguste M. Tessier, Rimouski, Quebec, one of His Majesty's Counsel learned in the law for the said province, to be a Puisne Judge of the Superior Court in and for the Province of Quebec. Nov. 7. His Hon. John McKay Junior Judge of the District Court of the Provisional Judicial District of Thunder Bay, Ontario, to be a Surrogate Judge in Admiralty of the Exchequer Court for that portion of the Toronto Admiralty District comprised in the territorial districts of Thunder Bay and Rainy River, in the said province, in the room and stead of Hugh O'Leary, Esquire, resigned. Nov. 14. The Hon. John Edward Martin, a Puisne Judge of the Court of King's Bench for the Province of Quebec, to be a Puisne Judge of the Superior Court in and for the Province of Quebec and to perform the duties of Chief Justice of the said Superior Court in the District of Montreal as it is constituted for the Court of the King's Bench sitting in Appeal. Alexander Rives Hall of the City of Montreal, Quebec, Esquire, one of His Majesty's Counsel learned in the law for the said province, to be a Puisne Judge of the Court of King's Bench in and for the Province of Quebec.

**Commissions.—1921:** Sept. 3. Henry A. May, Ottawa, Ont., head clerk in the office of the King's Privy Council for Canada, to be a Commissioner to tender and administer to and take from all and every person or persons who now holds or hold, or who shall hereafter hold any office or place of trust or profit or who may be appointed to discharge any duty under the government of Canada, the Oath of Allegiance and the Oath of Office and such other oath or oaths as may from time to time be prescribed by any law or statute in that behalf made and provided. Oct. 31. The Hon. Sir John Douglas Hazen, K.C.M.G., Chief Justice of New Brunswick, to be a Commissioner to investigate into and report upon the claims filed in the Department of the Secretary of State pursuant to advertisements therefor, namely:—(a) Claims of persons residing or carrying on business in Canada who have been subjected to loss and pecuniary damages arising through the destruction of life and property through the illegal warfare of the enemy, and (b) claims for damages to which persons residing or carrying on business in Canada have been subjected for breaches of contracts, which contracts were prevented from



being carried out owing to the operation of the statutory list of persons in neutral countries with whom such contracts were declared illegal for the purpose of determining whether they are within the categories set forth in Annex I of Part VIII (Reparation), Section I of the Treaty of Peace between the Allied and Associated Powers and Germany, signed at Versailles June 28, 1919, and the fair amounts of such claims, and to make such findings as may be of assistance to the Government of Canada in determining which, if any, of such claims should be paid and the extent of payment thereof. 1922: July 22. James Layton Ralston, Halifax, N.S., one of His Majesty's Counsel learned in the law; Walter McKeon, Toronto, Ont., Doctor of Medicine, and Arthur E. Dubuc, Montreal, Que., Engineer, to be Commissioners to investigate into and report upon complaints made by certain officials of the Great War Veterans' Association and generally questions relating to pensions, medical treatment and re-establishment needs of Canadian ex-service men and their dependents, including the question of canteen funds. The said James L. Ralston to be Chairman and Howard D. Dewar to be Secretary of the said Commission. Aug. 11. Oscar D. Skelton, Kingston, Ont., Professor of Economics, Queen's University, Arthur G. Doughty, C.M.G., Ottawa, Ont., Deputy Head of the Public Archives and Keeper of Records, and Gustave Lanctôt, Ottawa, Ont., Chief French Archivist, Department of Public Archives, to represent Canada at the International Congress of the History of America to be held at Rio de Janeiro during the month of September, 1922. Oct. 16. Alexander R. Forbes, North Sydney, N.S., to be a Commissioner to investigate charges of political partizanship against government employees in the four Counties comprising Cape Breton Island, N.S., Inverness, Victoria, Cape Breton and Richmond, and to report the result of each such enquiry. Alfred Nadeau and Oscar Drouin, Advocates, City of Quebec, to be Commissioners to investigate charges of political partizanship against government employees in the Province of Quebec, and to report the result of each such enquiry. Oct. 27. George S. Inman, Charlottetown, P.E.I., one of His Majesty's Counsel learned in the law for the said province, to be a Commissioner to investigate into and report upon charges of political partizanship against government employees in the said province of Prince Edward Island. Nov. 7. Louis Robichaud, of Richibucto, New Brunswick, barrister-at-law, to be a Commissioner to investigate into and report as to whether the dismissal of Albert M. Goguen from the position of fishery guardian was justified on the ground of inefficiency, and whether Wilfred Bourgeois had efficiently discharged his duties in a similar position last year and since his employment this year. Nov. 11. Malcolm Graeme Cameron, of the Town of Goderich, in the Province of Ontario, one of His Majesty's Counsel learned in the law for the said province, to be a Commissioner to investigate into and report upon charges of political partizanship against government employees in the Province of Ontario.

**Imperial Honours.—1922:** June 20. To be a Member of His Majesty's Most Honourable Privy Council, the Hon. William Lyon Mackenzie King, C.M.G. (Prime Minister of Canada).

**Official Appointments.—1921:** Nov. 4. Calvin Lawrence, Ottawa, Ont., Legislative Representative of the Brotherhood of Locomotive Engineers, to be a member of the Board of Railway Commissioners of Canada. **1922:** Jan. 10. Wilfred Laurier McDougald, Montreal, Que., to be chairman of the Board of Harbour Commissioners of Montreal, Que. Jan. 24. Wilfred Laurier McDougald, to be President of said Board, *vice* W. G. Ross, resigned. Jan. 30. Major P. K. Hodgson, O.B.E., Territorial Army Reserve, Suffolk Yeomanry, to be Comptroller of the Household of His Excellency the Governor General, *vice* Captain E. Greene, M.C. (resigned). Jan. 30. By Order in Council Messrs Joseph L. Fortin, Robert F. Grant and Norman Labelle to be appointed Commissioners for the Harbour of Three Rivers, Que., in the room of Messrs Joseph F. Bellefeuille, J. L. Durand and Thomas Tebbutt. Feb. 2. Milton Hersey, B.A.Sc., M.Sc., LL.D., and Emilien Daoust, Montreal, Que., to be members of the Board of Harbour Commissioners *vice* Farquhar Robertson and A. E. D. Labelle (resigned). Feb. 4. George H. Hyndman, to be Comptroller of Currency. Feb. 7. The Hon. Hewitt Bostock, of Monte Creek, B.C., to be Speaker of the Senate in the room and stead of the Hon. Joseph Bolduc. Feb. 10. Peter C. Larkin, Toronto, Ont., to be High Commissioner for Canada in the United Kingdom. Mar. 1. W. Gerard Power, Brig.-Gen. I. L. Tremblay and Jules Gauvin, to be Harbour Commissioners of the port of Quebec, the first named to be President. Mar. 8. Edward Wilson Berry, Calgary, Alberta, Dominion Land Surveyor, to be appointed as special examiner under the Dominion Land Surveys Act. Hon. Rodolphe Lemieux to be speaker of the House of Commons. Aug. 14. Messrs. R. E. Beattie and Samuel Prenter to be appointed members of the Vancouver Harbour Commission. Sept. 25. Messrs. William Ainslie, John Newland and William B. Sheppard, all of Hamilton, to be appointed members of the Hamilton Harbour Commission and William Ainslie to be Chairman. Oct. 9. Messrs. Laughlin, P. Hughes and Harry C. Earle to be appointed Commissioners for Belleville Harbour. Nov. 11. Harold Leonard Palmer, Charlottetown, P.E.I., Prothonotary of the Supreme Court of Prince Edward Island, to be Registrar in Admiralty of the Exchequer Court in and for the Admiralty District of the Province of Prince Edward Island. Henry Smith, Charlottetown, P.E.I., Clerk of the County Court of Queen's County, to be Marshal in Admiralty of the Exchequer Court for the Admiralty District of the Province of Prince Edward Island in the room and stead of C. R. Smailwood, resigned.

**Day of General Thanksgiving.**—Monday, November 6, 1922, was appointed by proclamation, as a "day of general thanksgiving to Almighty God for the bountiful harvest and other blessings with which Canada has been favoured this year." In 1921, Thanksgiving Day was Monday, Nov. 7.

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